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A DISCUSSION OF MONEY

by

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A DISCUSSION OF MONEY

PREFACE

THE present volume, like its predecessor, *An Introduction to Money* (Longmans, Green and Co., 1938), has a double aim: it is intended to be of service to the student of economics and to the general reader who wishes to enquire how the monetary system affects himself and his fellow men. The purpose has been to cover a large number of the sundry aspects of money shortly, incompletely as to many details, since the general reader and the student have neither unlimited time nor inexhaustible patience. Perhaps, as the title may suggest, the argument passes too easily from one topic to another, a defect which a copious index may do something to remedy for the student.

I have used in the main the arrangement of *An Introduction to Money*, and here and there passages from the earlier work have been taken over with little emendation into the new; but the vestigial traces are few upon the surface: the skull has ancestral characteristics; the expression on the features is the product of our recent environment.

I have thought it proper to begin with the definition of terms, to touch upon historical origins and development and to describe a few major monetary institutions before turning to theory: a brief treatment of index numbers and of the Quantity Theory leads straight into the complexities of the Keynesian analysis, which I have tried to render in a form assimilable by the general digestion; for it has seemed to me that without the theory there may be lacking a clear understanding of that economic and monetary policy, and of those banking techniques and international complications, to which the remaining two-thirds of the book is devoted.

As is that of other writers of to-day upon monetary matters, my debt to the late Lord Keynes is very great. But lesser debts are owing also to many other authorities for valuable ideas of whose parentage I have not remained in all cases aware.

Certain present problems are treated at considerable length, and the recent past is given space not only in order to illumine the road by which we have come where we are, but also in the hope that the reader will see that the difficulties of to-day are not wholly unlike those of times past, and that he will reflect upon the extent to which the old solutions were good and remain applicable. Thus the emphasis of this book is really upon the future, which by understanding and wisdom we may yet modify or the better.

Finally I hope that a rather provocative treatment of certain matters will prove stimulating, even to those who may remark with Mr. Sherlock Holmes: "When I said that you stimulated me I meant, to be frank, that in noting your fallacies I was occasionally guided towards the truth."

Oglethorpe University, U.S.A.

11 July 1950

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CHAPTER I

DEFINITIONS

In economic studies the technical terms have to be defined.

IN the pure sciences words abound which have only scientific meanings. Doctors, biologists, chemists and others have their own private languages; and the layman, if he trespasses at all, treads delicately among the pitfalls. But those who speak and write private languages are clear as to the meanings of the terms used: there are no arguments; the words are scientifically defined.

Unhappily this is not the case in economics. Technical terms exist indeed; but instead of these being words known only to the economist, they are words in everyday use. Common words are the technical terms of economics. Thus the economist attaches special and precise meanings to such terms as capital, money, investment and to many more. A failure to realise this fact can result in serious misunderstanding. Journalists and politicians, perhaps, are more prone than most people to read or to hear the economist's words, to suppose that he and they use the terms in the same way when that is not so, and to draw wrong conclusions. The field of the pure sciences is visibly dangerous with verbal pitfalls; but in the terrain of economics the Adversary has been at work: the way is sown with invisible anti-personnel mines, of which the wayfarer is not aware until an explosion of wrath from the economist indicates that he has put a foot wrong.

Again, in plane geometry, an abstract science, a straight line is defined as the shortest distance between two points; but in ordinary speech, when we speak of a straight line, we use the expression loosely to mean something roughly straight. We never meet the straight line of the school textbook in actual life. What we commonly call a straight line is not really one according to the definition, though it may be near enough for ordinary purposes. Just in the same way, we speak loosely about money, capital, income and such things; but in economics we have to know exactly what we are talking about, else we shall become confused. The art of definition is difficult in economics because, when we define a term, we often have to go on to define the words used in our definition; for all the words at our disposal are debased in ordinary speech so as to mean several different things. Worse than that: different economists have defined the same words in different ways, so that when Prof. Harp talks about 'incomes' he may mean something different from what Dr. Carp means by 'incomes.'¹ This

¹ For the sake of brevity, we shall use two fictitious names, Prof. Harp and Dr. Carp, the former representing an academic and theoretical point of view, and the latter a practical 'City' standpoint. In order to indicate the cleavage between the points of view, the remarks and ideas ascribed to these fictitious persons are, in places, somewhat artificial.

habit of defining terms differently is a sad business, for it causes great confusion, and economics is difficult enough without making it any harder than it need be. Obviously the danger of confusion will be lessened, however, if it is recognised clearly that different people may mean different things by the same words and the same things by different expressions. The definition of terms is a wearisome business, but it will have to continue until the happy days when the meanings of words in economics are agreed universally.

✓The definitions in this book are not of course original: they attempt to coincide with those of well-known authorities whose names and works are cited from time to time. ✕

Money may be defined as the means of valuation and of payment; as both the unit of account and the generally acceptable medium of exchange.

The subject of this book is money, and this is the first thing which we have to define. We define money as the means of valuation and payment: on the one hand money is the abstract unit of account; the mathematical apparatus used to express price; and on the other hand money is concrete medium of exchange, the thing given from one person to another in payment.

To begin with let us consider briefly the abstract side of money. We said that money in this sense was a mathematical apparatus, which may seem to make the matter more difficult than it need be, especially if the word money conjures up in our minds only the simple, concrete pounds, shillings and pence of everyday transactions. But let us ask instead what an inch is. Can an inch be picked up and handled? An inch is a distance, a creation of the mind, an idea; it can be thought of, or represented by strokes and numbers on a ruler, but itself it is intangible, invisible and unsubstantial. So is the abstract side of money, the unit which we call a pound sterling, or any other unit of account. We reckon in pounds, use them to compute the value of miscellaneous things; we juggle mathematically with them, multiplying prices, dividing values, adding costs and subtracting expenses. The unit of account is the vehicle of our thoughts of value, price and worth. Without it we should remain pedestrian in the economic section of the mind.

Now let us take for consideration money in the concrete sense. We may make a distinction between more primitive and more advanced types of concrete money. Among the former we should find things desired for their own sakes: cattle, rice, gold and other things of paramount importance to primitive peoples. These have passed in payment in times gone by, and among backward peoples they do so still. The distinguishing characteristic of advanced types of money is that they are wanted not for their own sakes but because they can be used to buy desirables. We shall see that coins, notes and bank deposits are advanced types of concrete money having this characteristic.

Both primitive and civilised media of exchange, with one important exception, are things, concrete tangibles, whose substance can be seen and felt. The exception is bank deposits, which are most important; with these we shall deal later. As we might expect, the civilised are less bulky than the primitive forms, and for that reason preferable in advanced societies. In simple conditions bank notes, for example, would be inappropriate: clearly the art of reading must be known to many before these can become widely acceptable. Thus the primitive media of exchange are significant things of such sorts that people will not be in doubt as to whether they are desirable to possess.

All these forms of money, primitive and civilised, have this characteristic in common: that they are *generally acceptable* within a reasonably large economic area in exchange or payment for *anything* which can be bought, for goods or services in the broadest senses. *General acceptability is the essential quality of the medium of exchange.* ✓

It may be contended that general acceptability is NOT possessed by all of the developed or civilised sorts of money which we have mentioned: that a £5 note cannot be offered successfully by travellers on tramcars; nor quizes whereby to transfer bank deposits for meals in restaurants; moreover that the landlord will be wrathful if offered payment in half-pence. Yet in the several ways appropriate to them these forms of money may be called with justice generally acceptable: where one sort is unsuitable it may in most cases be used to obtain without difficulty a different kind customary for the payment in question; and there is no payment within a country which cannot be fulfilled by one or other of these forms of money. Thus we may say properly that money in the concrete sense of this word, at least collectively, is generally acceptable; that it is so is the condition of our considering it to be money.

It may seem strange that money is both a varied collection of concrete things upon the one hand, and, on the other, an abstract set of units. But so it is. Some authorities, fearing confusion between the one sense and the other, avoid the word money and make use of two special terms, namely means of payment and monetary units. By the expression 'means of payment' such writers intend to describe money in its concrete form; by monetary units they mean to indicate the abstract use. At times we shall find it useful to speak in these ways. Yet in general little chance exists of confusion between money in its physical and money in its mental manifestations; moreover, since we are used to both, whether we realise the fact clearly or not, there is advantage in using in both senses the one word money.

Perhaps the abstract side of money may be understood more readily by thinking of the guinea. There are considerable fields of enterprise, within and without the terrain of retail trade, where custom still requires pricing in guineas. No guineas circulate. They ceased to do so during the Napoleonic Wars, over a century and a half ago; and afterwards only sovereigns of 20s. and no guineas were issued. Yet even apart from speci-

mens surviving in the collections of numismatists, guineas are still realities in our economic life; but they are realities only as units: the abstract side has survived the concrete coin.

Money has been defined in many ways: among these we may notice the one which declares money to be the agent of indirect exchange. This is an adequate definition only if we make the phrase include the abstract side, which it can barely do without straining the meaning of the words; and in any case exchange is not the only activity which money makes more simple. But yet this definition has its use, for it refers to the contrast between a barter regime and a money regime, which we shall touch upon in Chapter III. Exchange which, as the counterpart of specialising in production, has given the world its richness in commodities, may be of two sorts, either direct or indirect. Direct exchange is bartering good for good, or 'swopping,' in the word of other years; and indirect exchange is the more advanced case of buying and selling, goods against money, and money against goods, the money coming in between. In viewing a barter system in contrast with a monetary one we shall be able to perceive points about money which their very familiarity obscures.

Some authorities, however, define money more narrowly.

Often money has been given definitions narrower than the wide one which we have adopted. Some writers exclude the abstract side entirely. This is not altogether unreasonable. It may be argued that anything which is generally acceptable as a medium of exchange will also be used as a unit of account; thus that a sufficient definition has been given without mentioning the unit of account. This argument suggests, however, that the unit of account function is incidental; to suggest that it is incidental almost implies that it is unimportant. But the unit of account function is not unimportant: it is undeniably of great significance, as we shall see. Thus it seems better to define money as both a unit of account and a medium of exchange.

Other authorities stress the abstract side, but include only coins and notes as the concrete manifestations, so excluding bank deposits which they are compelled to refer to as money-substitutes, bank-money or something of the sort. This practice was common in times gone by for reasons not very obscure. It is more difficult to see why definition of this sort lingers on in America, but so indeed it does.

Now this is only a question of definition. Yet ^{with} ~~breath~~ and fury have been expended, perhaps they will continue to be, upon the question of whether money should be defined widely or narrowly. Prof. Harp, with his analytical insight, inclines to the wide school; Dr. Carp, full of sound City sense, objects vigorously: "these are money," he contends, drawing bank notes from his wallet, "and so of course are these coins; but the idea of including bank deposits—absurd!" The Professor shows with commendable logic and restraint that 'money in the bank' serves the same purpose as money in the pocket. But there is no reason why our imaginary

authorities should ever agree. Equally there is no reason why each should not reach valuable conclusions after defining the words in his own way. In this instance we are with Prof. Harp. Dr. Carp's partisans are in danger of framing careful propositions about 'money,' in their sense, and of failing to perceive that what they say about 'money' is equally true of bank deposits. For that reason we contend that the advantage lies with Prof. Harp and the proponents of the wide definition: hence the wide definition is given above. But we may not say invidiously: "Ah, Dr. Carp is wrong: he leaves out bank deposits." It may be that this learned authority does so; but if he defines his words clearly and uses them consistently then his conscience is clear. It is a question only of which practice is the more useful. Experience of the verbal contortions of the narrow definitionists does suggest rather strongly however that they make trouble for themselves. Indeed, it is sometimes worse than this: excellent writers can make erroneous or misleading statements about 'money.' They say, for example, that in certain circumstances the volume of money in a country increases. What they mean particularly and especially is that the amount of bank deposits increases; but since they have defined money to exclude bank deposits this is not the meaning of their statement. In other words, they are not consistent: they define money narrowly and use the term broadly. Sooner or later the narrow definitionist falls into the trap which he has set for himself. Thus, even if we are concerned with a matter which is *only* one of definition, we shall be wise to avoid digging pits in our own path. The wide definition is sounder since there is for the vital purposes which we shall discuss at length later no analytical difference between bank deposits and other forms of money.

Some who write about money refuse to define it at all.¹ No doubt this saves the time of many readers who will have clear and accurate ideas about the matter discussed. But to offer no thoughts regarding definitions is a risky proceeding. The reader may be seeking for just those thoughts; or he may not even realise that such thoughts may be of value. Such strange ideas prevail upon monetary matters that it seems unwise to assume the definition even of money itself; but rather at the risk of tedium to explore the meanings of this and other words; to make careful choices as to definitions and then to use the words, as technical terms should be used, deliberately and consistently.

✓ The expression 'money is as money does,' which was heard some years ago more commonly than to-day, bears upon the definition of money. This we may call a wide idea; evidently it is opposed to the thoughts of those who prefer some narrow definition of money, and who expatiate therefore upon 'money,' by which they mean currency, and 'money-substitutes' when they want to describe other species. Yet in order to derive benefit from this old-fashioned expression we are compelled at once to ask what money does. To this question there are many answers whose terms, like names upon signposts, would take us deeply into the jungly

¹ See Edwin Cannan, *Money* (1935), p. 2.

by-paths of finance. We are not prepared as yet for such adventure. So 'money is as money does' is not serviceable to us as a definition; yet it may be useful to us as an auxiliary idea to keep in mind against some future moment of uncertainty.

One school of thought emphasises the legal status of money; but the 'commercial' idea of general acceptability is vital to the definition of money.

There is a doctrine known as the State Theory of Money. In a simplified form this may be stated as four propositions: what is essential in economic relationships is debt; the law mentions money only in relation to debt; ~~thus money is what the State ordains to be~~ good quittance of debt; anything can be used as a medium of exchange, but that is not money.

The most important proponents of this view are Knapp¹ and Prof. Hawtrey.² Knapp, not unlike other German writers of his time, was impressed by the power of the State in monetary matters; and it is proper indeed to realise that the power of the State in this respect is great: monetary decisions are frequently the exercise of sovereignty. Prof. Hawtrey finds this view acceptable when stated carefully. For him money has, as it has for us, a double aspect: it is a unit of account; likewise it is legal tender. This has been called the lawyer's view of money. It is opposed by the 'commercial' view of general acceptability. Our wide definition cannot stand without its 'commercial' prop. For us it is the general public and not the law which decides whether the media shall be money or not; for we shall see later that there may be a conflict between these two arbiters: when that occurs it is the voice of the people which prevails.

We may perceive that the lawyer's view is really the same (at the present time) as that of Dr. Carp and the narrow definitionists. We have said something already in justification of the opposing view, thereby ranging ourselves with Prof. Harp.

We may notice also that the idea of general acceptability is described as 'commercial.' This is reasonable. It is now difficult to tell without special research where the idea came from. It may indeed have come first from the City. Yet we were not being wholly misleading when we made the commercial Dr. Carp sponsor the narrow definition: it may be heard still in the City of London. What has really happened is that the wide definition has been taken over by the professional economists, at least in Great Britain, and they have made it very much their own.

Sometimes 'money' means the loan of money. ✓

Finally we may notice an important point made with all his charming and lucid emphasis by Mr. Hartley Withers.³ He observes that the word

¹ G. F. Knapp, *Die staatliche Theorie des Geldes* (1905); English trans., H. M. Lucas and J. Bonar, *The State Theory of Money* (1924).

² R. G. Hawtrey, *Currency and Credit* (1923), ch. ii; *The Gold Standard in Theory and Practice* (1933), ch. i.

³ Hartley Withers, *The Meaning of Money* (1932), ch. i.

money, standing all by itself, is sometimes used to mean the loan of money. Two notable instances, he points out, are the 'Money Market,' where money is borrowed, and 'the price of money,' which means the rate of interest at which money can be borrowed. It is as if one described a lending library as a bookshop, and the subscription as the price of the book. Economy of words has led, as it often does, to superficial absurdity in the case of these two expressions; for 'the Money Market,' appears to mean the place where money is bought, and since it could be purchased only with money, the name suggests a ridiculous process. Similarly with 'the price of money.' We shall in general avoid speaking of the price of money; but the other expression is so common and so well established that it would be unjustifiable to coin an alternative phrase.

Frequently the 'real' needs to be distinguished from the 'nominal'; likewise income from capital.

Many indeed are the terms of ordinary speech which have special and precise meanings in economics; two more of these we must elucidate forthwith: the adjectives 'real' and 'nominal.'

'Real' denotes for us something concrete or actual: it refers to goods and services themselves. 'Nominal' denotes the *value* of things: it gives a monetary expression whereby goods and services may be referred to; in fact the word *monetary* may be used instead of nominal (though the converse is not true, since monetary has a wider meaning).

Thus real income is a stream of goods and services enjoyed over a period of time. Nominal income is a monetary expression indicating the value of real income. When the word income is used alone it may mean either the real or the nominal; usually the context makes clear which sense is intended. But Prof. Harp, who means real income, and Dr. Carp, who means nominal income, are likely to misunderstand each other, especially if either sometimes uses the word in the other sense.

We are accustomed to speak of a man's income being £500 a year, and Dr. Carp, that champion of the common point of view, sees no difficulty in using the word in that sense. But the penetrating Prof. Harp points out that £500 a year tells us only the value of the income; a man does not feed himself upon pound notes, he observes, nor clothe, nor house himself therewith; income actually consists of the food, clothing, etc. bought with the £500 a year, which is only the means, not the final object for which a man works. We clear up the dispute between the authorities by calling Dr. Carp's £500 a year the nominal income, and calling Prof. Harp's stream of purchases per annum the real income.

The case of capital is worse. Prof. Harp is interested in comparing the amount of railways, docks, factories and other big, semi-permanent structures which different countries possess; so he writes a book describing all these things as capital. Dr. Carp, the City expert, writes, on the other hand, that "the capital of the railways was too high." Now the Professor means what we shall call real capital, the stock of valuable things at a

point of time. But Dr. Carp is in trouble. Thinking of how we distinguished between the authorities in the case of income, we ought to be able to say that what Dr. Carp means by capital is the monetary value of real capital at a moment of time. Now it is perfectly true that he probably will use the word in this sense; but we shall also find him talking about the original amount subscribed by shareholders to start a railway company as that company's capital, or even as its *nominal* capital. What he often means by 'capital,' and always means by 'nominal capital,' is the monetary value of the company's assets *at the time when it was started*. This is an exceptional case, for Dr. Carp would speak (in the present tense) of a man's capital or a country's capital meaning the *present* values of their real capitals; only in the case of a company owned by shareholders does the nominal capital always, and the capital sometimes, mean the *original* and not the *present* value of the real capital.

We have then three distinct sorts of capital:

1. real capital, a stock of goods at a point of time (*à la* Harp);
2. nominal capital, which means the contemporary value of an amount of real capital;
3. what we may call legal capital (always described in the financial press as nominal capital, however), which is the amount on which companies pay fixed interest or dividends.

Thus, to put the matter in the form of examples, we may say:

1. that a railway company has a real capital consisting of a permanent way, rolling stock, stations, sidings, goods yards, etc.;
2. that some rich man has a nominal capital of £1,000,000;
3. that the legal capital of a certain firm is £2,000,000, although the present value of its real capital is about £5,000,000.

We shall avoid speaking of the nominal capital of *companies*, so as to preclude confusion between the use of that expression by the financial press, when it means what we have called legal capital, and the strict sense in which the words mean contemporary value, as they do when applied to a man, a country or the world.

We are accustomed to speak of £1 shares, also of shares of different denominations, but £1 shares are the commonest. This was the original value, or par value; and £1 will still be shown as a liability by the issuing company in the capital account of its balance sheet. Indeed, before ever the share was first issued and paid for, the value may have begun to diverge from £1. Yet we still call it a £1 share because it is entered on the balance sheet in that way as part of the legal capital. Now the present value will be different; it would be a coincidence if it were the same. The present value will appear when the share is sold and bought on some Stock Exchange. Custom requires us to call this the current value, or present price, or to-day's quotation: it should not be called the nominal value.

Various technical terms refer to monetary groups: legal tender, currency, cash, commodity money, token money, representative money, fiat money, bank money, substitute money, credit, overdrafts.

For sundry reasons authorities on money make use of various terms to describe groups of money. As we have noticed already, their use of words may differ. It will be as well therefore if we touch briefly upon some of these terms indicating how we shall use them in later chapters.

The monetary groups overlap since they have been made in order to emphasise different characteristics of money. Just as we can analyse the same collection of people in different ways, dividing them into French, English and Dutch, or into male and female, or into children, youths, adults and aged, or into blonde and dark, so also can we divide money into categories which are sharply distinct, like male and female, or into categories which shade gradually into one another, like blonde and dark, or into groups whose characteristics require careful definition as in the case of nationality. The groups of money are of different degrees of distinctness.

Legal tender. Legal tender we have mentioned already in relation to the State Theory of Money. Here the line demarcating this sort of money is quite clear since, as the name suggests, it is laid down in law. Legal tender is the *lawful* form of payment. This does not mean indeed that a creditor *must* always accept it in repayment of a debt. But if the debt were contracted in pounds sterling, or dollars or francs, then the creditor cannot insist on repayment in a form other than the legal tender of the country whose monetary units appear in the loan contract. Furthermore if, as is normal, interest is being paid on the debt, the offer and refusal of repayment in legal tender would bring to an end the legal obligation of the borrower to pay interest. Moreover most advanced countries have statutes of limitation: if the debt is outstanding for a period exceeding six or seven years after the offer of repayment (such repayment not being contrary to the loan contract), then in general the creditor will be able no longer legally to compel any repayment at all. On the other hand, forms of money other than legal tender may be accepted in repayment if the creditor so chooses; but he cannot be made to suffer in relation to either interest or principal if he stubbornly insists upon refusing any other form of money, and upon receiving repayment in legal tender money.

Among the English media of exchange which we shall examine somewhat carefully in Chapter II, we shall find gold coins, Treasury notes and Bank of England notes. These in succession have been unrestricted legal tender. It does not matter how large is the sum owed: if we owed someone a million pounds, we could pay him (to-day) with a million £1 Bank of England notes. If he refused to accept payment in this form, and demanded a cheque instead, he could not force us by going to law to pay him in the way which he required. Conversely we could not force our creditor to take our cheque for £1,000,000 (or for any amount) if he did not want it; he

could sue us at law successfully for £1,000,000 in Bank of England notes.

Copper and 'silver' coins put their noses so to speak into the legal tender category. Copper is legal tender up to one shilling, and 'silver' to £2. The reason for these limits is clear enough: it would be intolerable if a spiteful debtor were permitted to make large repayments in copper in order to annoy his creditor.

Again, the fact that some forms of payment are not legal tender may be understood readily: this is so for the protection of creditors. A cheque as we shall see more clearly in Chapter II is not money, but it is at least a way of transferring bank deposits from one person to another. But if the law made 'payment' by cheque a good quittance of debt, a creditor would be liable to be defrauded by accepting a worthless cheque. Thus none of the instruments for the transfer of deposits is legal tender.

In other countries, laws of legal tender are much the same as in England. The notes of small private banks are never lawful money; most other notes are. Sometimes a government agrees always to accept notes of a certain sort in payment of taxes; that has the effect of making them pass in circulation as easily as legal tender. Cheques and the like are nowhere legal tender.

Currency. The term currency means coinage and notes together, the whole of the tangible media of exchange. Other definitions of the word currency are not unknown indeed, but they are rare. For the sake of accuracy, however, it will be as well if we enter at this early point some words of caution about the use of the expression currency. When we come in the later chapters of this book to speak about international monetary relations, we shall conform with the established practice and refer to 'a currency' when we mean a particular currency unit like the dollar or the pound sterling. The word used in that way is virtually a technical term in the foreign exchange markets. This is not a good example at all of how words should be treated; it is indeed a shoddy piece of terminology, and all too often associated with shoddy thinking. Yet it would be most extraordinary to write about international monetary matters without speaking of 'a currency'; and we shall have to make that concession to established usage. This use—or, honestly speaking, misuse—of the word currency will not trouble us, however, in the early part of this book.

Cash. The term cash seems to have no less than seven separate meanings:

1. anything which is customary in payment, synonymous with medium of exchange;
2. coins and notes, synonymous with currency;
3. coin only;
4. the smaller or subsidiary coins, particularly excluding any gold coins;
5. small change: any medium of payment less in denomination than a certain (unspecified) amount;

6. Chinese copper coins;
7. the currency in the tills of commercial banks plus their deposits at the Central Bank.

Thus cash is a bad loose word, and we shall avoid it as far as possible. In speaking of banks, however, we shall employ the word in the last of the senses given.

Commodity money. Gold coins are described as being full-bodied. This means that the amounts of gold of which they are composed are equal to their face values. Thus a sovereign contained 20s. worth of gold. Such money is called collectively commodity money. Occasionally the term commodity money is met with when coins which are not full-bodied are also included: it is hard to find justification for this practice. By commodity money we shall always mean full-bodied money.

Full-bodied coins are now extremely rare, for gold coins have all but disappeared. There have been multitudes of full-bodied gold coins in the past, however; furthermore most of the silver coins of the past, more numerous and more important than the gold ones, were full-bodied, but the present day 'silver,' and even present day 'real' silver coins like the delightful Swiss five-franc pieces, have all lost caste.

It is evident that the category of commodity money includes other things besides coins. In particular it includes those many primitive types of money to which we have alluded, cows, knives, rice and many others. These are certainly commodity money: it would seem that they are, *natura propria*, full-bodied, though the sort of difficulty which arises here can perhaps be guessed.

Token money. Every coin which is not full-bodied is a token, and taken together they are called token money. When commodity money loses caste it becomes token money. It is clear therefore that practically all the coins circulating in the world to-day belong to the group of token money. Many base metal coins have always been tokens, but we shall notice that some of these too have been in their heyday commodity money.

Representative money. Akin to token money is representative money, which means those notes which are freely convertible into full-bodied commodity money. There are no examples of this sort of money now in England, but Bank of England notes were of this kind until 1914; for a holder could take one to the Bank and demand as of right to receive sovereigns for the amount of the note brought. This sort of money represents commodity money, but since the latter has almost entirely disappeared representative money has inherited the legal tender status, so changing its nature. We need the categories token money and representative money in order to bear in mind why those sorts of media became readily acceptable in exchange and payment. From the point of view of acceptability there is no real difference between the two, and we might say that the note is a paper token, or that the token coin is a representative note with the words and devices fashioned on metal instead of on paper.

We utilize separate names normally, however, because the two categories are different in substance.

If we divide a nation into working and leisured—the line between the two is difficult to draw—some people will pass over with the flow of time from one group to another, and some will die. Similarly full-bodied coins pass over into the token class, and some in each class die. Most base metal coins, on the other hand, have been leisured all their lives in the sense that they have never worked as full-bodied coins. It would seem, however, that some sorts of commodity money, the cows used as money in primitive societies, for instance, could never leave the working life and enter the representative or token class. In such a case there is no question of melting down to see what the content is worth. A cow is a cow, and it would seem that there is no more to be said. But one cow differeth from another in glory. Do lean kine degenerate into token cows, while only fat and well-favoured kine are full-bodied cows? Rarely so: the lean kine rather die a monetary death, from which better pasture of course might yield resurrection.¹ Notes, so to speak, were born rich, inherited legal tender status, and have lived all their lives in the leisured class, never working as full-bodied money.

Fiat money. Still considering why different sorts of money are acceptable, we must notice the group called fiat money. Money of this sort circulates because the State says that it shall be legal tender. The great bulk of fiat money is composed of notes, though token coins are also fiat money in a sense. An obvious example of fiat money was given when the Government issued the Treasury notes in 1914. But there are others besides Government notes. We said above that when commodity money disappears and representative money inherits the legal tender status, then representative money changes its nature: it becomes in fact fiat money. But we shall observe that fiat money almost changes back into representative money if a country adopts the Gold Standard. The late Lord Keynes, the great English economist, called fiat money coexisting with a gold standard “managed money.” Just what this means we shall discuss in Chapter X. To-day all English notes are fiat money, and so in a sense is the whole of the coinage.

Bank money. A larger group is the one called bank money, which consists of notes issued by banks together with bank deposits. We are thinking when we use this term of where the money comes from.

Substitute money. If, however, we want to stress rather the manner wherein the great mass of money came into being, we speak of substitute money. This may not be identical with bank money; for the latter consists of deposits and bank notes; substitute money consists of deposits and all notes, including any Treasury notes which may be in existence.

Credit. What is credit? In the financial sense credit is strictly speaking a belief in payment or in repayment. As applied to shops, it is the belief that a customer who does not pay for purchases at once will do so later.

• ¹ See J. M. Keynes, *A Treatise on Money* (1930), Vol. 1, p. 13.

As applied to banks it is the belief that a customer who borrows a sum of money will return it later. By extension the word has come to mean not only the belief but also the sum of money itself which the banker lends by reason of his belief or confidence in his customer. All bank deposits borrowed are therefore credit.

Overdrafts. In conclusion, the overdraft: we attach the term credit to certain media of payment in order to remember why they came into existence and because they have certain special characteristics. From this point of view, available overdraft is identical with a credit deposit; available overdraft is credit. The difference between obtaining a credit deposit on loan and obtaining an overdraft is this: the banker, in this second case, does not place a sum to the credit of his customer's account; instead he makes a note on the account of the amount of the overdraft, say £100. Thereupon the customer may, after drawing on the account until there is nothing left, *overdraw* the account until it reaches minus £100; he then possesses a minus quantity; that is, he owes the bank £100.

At a given moment, let us suppose the amount overdrawn to be £62; this amount, as well as the total permitted, is spoken of as the overdraft; the difference between the limit figure of £100 and the amount overdrawn is £38; it is this amount which we have called available overdraft, the part at any time remaining to be spent.

We may notice that the banker charges interest to the customer on the whole of a loan; he charges interest not on the limit figure of an overdraft but on the amount actually overdrawn.

Other definitions. There will be other definitions with which we shall have to deal in due course. But it is hoped that the worst of this labour is now over. In the course of it we have had to refer to banks, to the Bank of England, to the Treasury, and to matters other than institutions, without inquiring into their natures. This is a trouble always found in defining economic terms. Inevitably money cannot be described adequately without reference to banks. Banks cannot be treated without assuming an understanding of money, unless we are going to define everything at the same time and produce a dictionary of economic terms. The problem resembles that of the chicken and the egg. It is hoped that some important eggs have been defined adequately: sundry chickens, it is true, remain awaiting description.

BOOKS

As to the definition of money:

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CHAPTER II

THE NATURE OF MONEY

Money may be analysed according to its substance: copper, 'silver,' gold, paper, nothing.

CONCRETE money, or the medium of exchange, takes many forms: means of payment constitute a genus made up of many species.

Since we should dwell upon this matter unduly long if we considered many countries throughout a great period of time, we will confine our study at this point to England during the last fifty years. Here we find, to start with, several sorts of coin: first, our familiar coppers, the penny and halfpenny and their comparatively rare fellow the farthing. There are also our 'silver' coins, of which only the half-crown, florin, shilling and sixpence are common now. Up to 1920 these were made of silver of 'the ancient right standard of England,' that is, $92\frac{1}{2}$ per cent pure silver, or what people commonly call 'real silver.' From 1920 to 1946, the 'silver' coins were made half of silver and half of alloy, the latter being base metal whose intrinsic value was inconsiderable. As from 1947 our 'silver' coins have become cupro-nickel (75 per cent copper, 25 per cent nickel); they appear to have a uniform 'off-silver' colour, and after one year they were showing no signs of wear. Bank cashiers have particular reason to dislike these cupro-nickel coins since they make the hands dirty when they are handled in large quantities.

If we are going to state the whole truth in inquiring into the nature of the medium of exchange, then we must add that all through the fifty-fifty years, 1920-46, there continued as before a very small annual issue by the Royal Mint of what is called Maundy Money: a complete set of coins from 1*d.* to 1*s.* is issued in silver (real or otherwise).¹ In 1920 the Maundy Money was still $92\frac{1}{2}$ per cent pure; from 1921 to 1946 it was half of silver; but in 1947 it reverted to the ancient right standard of England, and this composition is expected to be continued. The designs of the Maundy shilling, sixpenny piece, and up to 1946 of the threepenny bit, were the same as the corresponding 'silver' coins issued in those years; the similarity of impression continues for the shilling and the sixpenny piece; but the (round) cupro-nickel threepenny bit is now discontinued.

The Maundy issue is not important nor large; it survives only for traditional reasons; it does not circulate; and the intervening coins are seldom or never seen by the general public.

¹ The writer is indebted in this paragraph and in the ones which follow to the Deputy Master of the Royal Mint by whose courtesy information upon several matters of detail has been confirmed.

In 1937 the twelve-sided threepenny bit began to supersede its 'silver' predecessor, which still continued to be issued, however, up to and including 1946. The new coin, usually considered more serviceable than the old one, is of cupro-zinc-nickel (79 per cent copper, 20 per cent zinc, 1 per cent nickel), looking more yellow than the 1947 'silver.'

Crowns, the old five-shilling pieces, are occasionally seen in circulation; but during this century they have been minted only in 1902, 1927 and 1937, in the two latter years for commemorative purposes: for King George V's Jubilee, and for the Coronation of King George VI. These new crowns do not circulate, but are kept as mementoes.

On the occasion of King George VI's Coronation also, certain gold coins were issued; but their prices of issue were greatly above their face values, so that these circulate not at all; and, having observed that they might reasonably be called 'over-full-bodied,' we can neglect them. With the exception of these, no gold coins have been issued since 1914, and those outstanding at that time ceased to circulate in the early months of World War I.

But concerning the vanished sovereign there is, as we have noticed briefly already, this one point to observe which still has importance: the piece of gold of which the sovereign was composed was always worth exactly £1 as gold; the value never varied while the sovereign was in circulation. In saying this we are not thinking of the case of a sovereign becoming worn: if it were badly worn, the gold content would, it is true, be worth less than £1; but if a sovereign were badly worn it would be withdrawn from circulation by the Bank of England and a fresh one would be issued in its place. Two half-sovereigns, again, weighed when new very slightly less than a sovereign. But the important point about the gold sovereign was this: the value of the gold which it contained did not vary; the price of gold did not change up to 1914: it was £3 17 10½ per standard ounce

Troy eleven-twelfths fine, and since the sovereign consisted of $\frac{160}{623}$ of one standard ounce (or 123.27448 grains Troy approximately) it was always worth £1 (since $£3\ 17\ 10\frac{1}{2} \times \frac{160}{623} = £1$).

We say then that the metallic value of the sovereign was, during the years in which it circulated, the same as its face value; and this was true of the sovereign alone. The silver obtainable from the shilling of the ancient right standard of England in 1914 was worth only about 5*d.*; and similarly with other silver coins. It is true that the silver content rose in value very much so that just after World War I the metallic value exceeded the face value, and there was thus some danger of the coins being melted down but this was an unintended aberration in the drab lives of the hard-working auxiliary shilling and the other silver coins; it was this deviation, however, which led the unforgiving authorities to debase the (real) silver coinage to

the fifty-fifty basis. After this change had just been made, the metallic value of the silver coins was rather less than half of their respective face values; as the years passed, the former fell still further. Our latest debasement of 1947 brings our 'silver' coins down to negligible metallic values. These may be compared to-day with copper coins, whose metallic values have always been very much less than their respective face values.

So far we have been concerned with those forms of the means of payment which are, or which were, coins. More important in a modern community are the notes, either bank notes or Treasury notes or both, which the economist calls paper money.

In England during this century we find the most important paper money to be the £1 and 10s. currency notes. These were issued first, from 1914 to 1928, by the Treasury to the Bank of England, which passed them on through the commercial banks to the public. They were usually called Treasury notes. They took the place of the sovereigns and half-sovereigns which, as from 1914, war finance caused to disappear (with so many other full-bodied articles).

By virtue of the Currency and Bank Notes Act of 1928, however, the £1 and ten-shilling Treasury notes were superseded by Bank of England notes of the same denominations. For long, the Bank of England had been issuing notes for larger amounts: there were (for public purposes) notes of £5, £10, £20, £50, £100, £200, £500 and £1,000; but these valuable scraps of thin white paper printed austere in black were not so significant as they appeared to be: they circulated among a number of people so small compared with the number of those using the brightly coloured £1 and ten-shilling notes, that the monetary total of notes of higher values has always been small compared with the sum of the two small notes, so that we may say that the notes of the higher denominations were relatively unimportant.

In April 1943 it was decided to issue to the public no more notes with a face value in excess of £5. As an extension of the same policy the £10 notes and those of higher values ceased to be legal tender on 1 May 1945; similarly the old £5 notes ceased to be legal tender on 1 March 1946. Meanwhile, however, a new £5 note incorporating the metallic thread found in the smaller notes had begun to be issued in replacement of the old £5 notes. The new notes remain legal tender, of course; and in fact the old ones are paid at the Bank of England on demand, so that for practical purposes the revoking of the legal tender status makes little difference to the holders of old Bank of England notes. The changes do mean, however, that the old notes will gradually disappear, whereas the new £5 note will become rather more common. Yet the £1 note is likely to remain about fifty times as common in circulation as the £5 note.

For completeness we might add that there are also values of Bank of England notes higher than the £1,000 note, but these elegant and still larger notes are used only among the departments of the Bank.

Both Treasury notes, in their time, and Bank of England notes were known as Government paper money, even before the Bank of England

was nationalised. This use of words was a little loose, but sensible enough indeed since the Government was, as it remains, ultimately responsible for the note issue.

There used to be a very small number of notes issued by a few small private banks, but these issues had all come to an end by 1921, and no new ones by private banks can be started.

It might be as well at this point briefly to mention postal orders, money orders, travellers' cheques and letters of credit. None of these, nor similar instruments, meets the test of general acceptability; thus none of them should be reckoned as money. Postal orders proceed normally from payer to payee, and the latter at once exchanges them for currency or for bank deposits. War emergencies indeed have caused postal orders to be made legal tender for short periods: for those periods therefore they have been money. But those cases are exceptional. Now and in normal times postal orders are only instruments for the transfer of money: when the transfer is made the postal order is cancelled and destroyed, which is not of course what happens to money. The case of money orders is similar.

Travellers' cheques likewise involve the surrender of money before they are issued by a bank or other agency to the purchaser. Because there is no need for a creditor such as a Swiss hotel to go through the formality of receiving the travellers' cheque, giving the tourist the appropriate sum of money and then receiving the same money in settlement of its bill to him, it might appear that travellers' cheques were received very much like bank notes. Yet the test of circulation is final in this case too. We do not meet our travellers' cheques circulating in payment like generally acceptable media of exchange; thus the former should not be classified as money. Letters of credit too are similar devices for obtaining money but they do not form part of the circulating media of exchange.

But the great bulk of our concrete money consists neither of coin nor of notes but of—nothing! Means of payment of this sort do possess names, however: they are called deposits, or cheque-deposits, or bank deposits, or bank balances. It is a striking paradox that the majority of the 'concrete' money of our times should have in fact no concrete existence at all; but so it is. Once deposits possessed concrete embodiment; but the bodies so to speak have withered away and only the tale of their passing remains!

Deposits are sums of money which a bank, like the Midland or the National Provincial, owes to us. To be precise, they are of two sorts, namely, demand deposits and time deposits, which the banks designate respectively current accounts and deposit accounts. It is necessary to give notice, usually a week's notice, to the bank before drawing cheques upon a time deposit account. Thus it is a question whether time deposits should be ranked as money or as investments, capable of being transformed into money, of course, but not actually being money at any moment of time. Propositions derived from the idea of the velocity of circulation¹ suggest that time deposits too should rank as money.

¹ See Chapter VIII.

These sums owed to us by a bank consist then of nothing tangible: there are entries in the bank's books to say that it owes us so much, and we can make a payment to someone else by transferring part of what the bank owes to us to what it owes to him. This process is, of course, 'payment by cheque'; in a very brief manner, on the cheque form supplied by the bank for the purpose, we write instructions to the bank to pay A. Smith, Esq., £10, and sign our name on the front of the cheque; Mr. Smith then takes the cheque to the bank and 'pays it in,' signing his name on the back. The bank thereupon adds £10 on to the amount which it owes to Mr. Smith, and subtracts £10 from the amount which it owes to us, thus completing the transaction. The figures in the books of the bank have changed, but no tangible money has been moved. One may say, if it helps understanding, that deposits *consist of* the figures in the bank's books: they certainly consist of nothing else.

It is perfectly true that notes may be got from the bank in exchange for deposits. But the bank keeps only a small amount of notes; it would not have enough to go round if all the depositors went in one morning and made out cheques to self for the whole amount of their deposits, demanding notes in exchange. Actually banks in England keep notes and coins totalling about one twelfth of the amount of their deposits. This twelfth, which is what the banks call 'cash,' is not all indeed in the form of notes and coins readily available in their tills; part of it consists of their own deposits at the Bank of England; such sums belonging to the banks as depositors at the Bank of England can be withdrawn, however, in the form of currency whenever they want it.

Above, we used the phrase 'payment by cheque,' which makes cheques sound as if they were money: they are not. The cheque is only the instrument whereby the invisible money is transferred. If we compare payment by note and 'payment by cheque,' the cheque is analogous to the action of handing over the note, not to the note itself; for when the note is put away in our creditor's pocket-book he has been paid; when he puts away a cheque instead, he possesses only the means of being paid, and he will be paid only when the bank adds the amount on to his deposits and deducts it from ours. So it is not the cheque itself which is money but the deposits upon which the cheque is drawn.

We may notice that there are other agents besides the cheque for the transfer of deposits: there are written instructions sent to a bank to 'convert' money to someone else; a banker's order which is like a cheque except that the sum named may be payable not once only, but once a year or once a month; and a special kind of cheque called a banker's draft which is a cheque drawn by one bank on another. We said that the essential thing about the medium of exchange was that it should be generally acceptable, that is to say, that it should circulate or pass round and round as payment from one man to another. Cheques and other agents for transferring deposits do not circulate in this way.

In the category of this predominantly important nothing-money there is

another element besides deposits: this is of course the element of unused overdraft defined briefly in the last chapter as constituting a part of the volume of credit.

The great bulk of our money is created by the banks: they mobilise securities to circulate as money.

In England at the moment only about a fifth of all deposits are credit, though the great bulk of the £5 thousand million odd of deposits came into being as a result of the creation of credit. Before World War II, the proportion of deposits which were credit used to vary between about one-third and one-half. Probably the proportion will tend gradually to change from the present low fraction of one-fifth towards the old proportions.

In creating credit for his customer, the banker lends nothing tangible; he merely enters a figure on the credit side of his customer's account and an equivalent figure in his records of loans to customers. His customer can by cheque transfer the credit-deposit to someone else, just as if it were an ordinary deposit without an equivalent sum entered in the banker's loan books; that is, the customer can make payment with credit just as well as with an unencumbered deposit. And if money is required in the form of currency instead, everyone supposes that the banker will have currency enough. How does the banker manage to lend this credit money? He CREATES it. Is there any limit to the amount of money which he can create? There is: we shall see in Chapters VI and XVI how the limit is reached. And how were the unencumbered deposits created? That will appear from the banks' balance sheets analysed in Chapter XVI.

Dr. Carp in his less lucid moments will deny stoutly that bankers create money. And indeed some bankers still object to economists circulating this scurrilous rumour about their activities. Dr. Carp would be inclined to argue that banks only receive deposits; that the customer pays in currency or a cheque and thereby his deposit is increased. Prof. Harp can afford to smile. First, he asks about the lending activities of banks. Dr. Carp has an answer to that: he replies that banks lend only when they find themselves with a surplus of cash (meaning currency and deposits at the Bank of England): "in other words," he says, "banks lend what is deposited with them; they don't create it." "But my dear Carp," the Professor answers blandly, "you admit that banks keep to an 8 per cent cash ratio; therefore 92 per cent of their deposits are *not* covered by cash. Where then did the 92 per cent come from? You know that total deposits add up to about £5 thousand million and there never has been cash in this country to anything like that figure. So you see these deposits have just been created by the banks." Dr. Carp, however, is not a man to give in easily. He seizes upon the banks' 92 per cent of deposits not covered by cash and points out that these *are* covered by other assets, that is, by securities; "So they are not just created out of thin air, sir, are they?" "Not out of thin air, perhaps," Prof. Harp has to concede, "but what does one mean by the expression, to create?" Then, being a learned man, he expatiates

upon the conservation of matter and shows how 'creators' of motor-cars only rearrange existing matter in certain forms; he touches upon the definition of production as the creation of utilities and finishes with an academic elegance convincing to any philosopher. But Dr. Carp has begun to breathe more freely. "Ah," he says, "I see what you mean now. But when you say that banks 'create' deposits, that only confuses ordinary men like myself. I thought you meant 'create' in the sense of a composer creating a sonata, or a poet creating a poem, what? Now what banks do is to mobilise securities; they make the securities pass as deposits. That's the word, mobilise. Because of their excellent reputation their debts pass from one of their creditors to another in payment. Call these debts money if you like: 'deposits' is a good enough name for me. But they only have the debts because they have received the securities as assets." Prof. Harp can agree: "Yes, by all means let us describe it as a process of mobilisation. Men are mobilised and become an army. Securities are mobilised and become money. I agree: that is what it comes to. I would still call it the creation of money, of course, but so long as our thoughts are clear our words matter little, don't you think?"

Both protagonists are justified. Since a certain deposit did not exist before a bank made a loan to a customer, and since it does exist when the loan is agreed upon, Prof. Harp is right in saying that a deposit has been created, or that credit has been created, or that money has been created. On the other hand, Dr. Carp is right in saying that securities have been mobilised. That is the nature of the process. It would be as well to accept Prof. Harp's solution, however, and to think of the securities, when mobilised, as becoming money; also to bear in mind that as the citizens, having become soldiers, do not cease to be citizens, so the securities, having become money, do not cease to be securities. A remarkable thing about this controversy between our two authorities is that the theory of money is singularly silent upon the question of what amount or what proportion of a country's securities should properly be mobilised as money. Later it may be that the theory of money will be extended to resolve this question.

Is it really right then to say that economists circulate a scurrilous rumour about bankers? It is not. The economists' wording is justified. Some bankers still do not like it, however, because it casts doubt upon their integrity; it makes them appear as financial wizards who create money, as Dr. Carp put it, "out of thin air." If bankers had never gone astray in the creation of credit, probably no one would object to the word create. But bankers have created too much credit in the past. In America this happened as recently as the 1920's. In England, however, excessive creation of credit resulting from the initiative of bankers has not occurred significantly since the nineteenth century. Furthermore the securities mobilised must be sound ones. That was not always the case in America before the Great Depression: hence the large and bitter harvest of bank failures there. On the other hand, British bankers are very conservative in their mobilisation policy, and rightly so; for the result is that Britain,

for all her economic difficulties, has a banking system of cast-iron strength which never will fall into bankruptcy. And that is no small asset to a national economy. It would seem that it is because they feel with good reason that they deserve well of the community that British bankers may resent the perfectly justifiable attitude of Prof. Harp and his followers.

The nature of money has been changing.

Having dwelt at some length upon the subject of bank deposits, which we have called nothing-money, perhaps we may ask usefully at this early stage what the essential nature of money is. It began as cows, or rice, or skins; after the Dark Ages it became silver and then gold; it developed into notes; and now the bulk of it consists of nothing at all. The matter comes to this: the monetary system is the method of keeping the score in the economic game; the bank books are the score books, and the figures in them, called deposits, are the score.

It would be of no effect of course to present to the view of an illiterate savage a score book and to ask him to believe from that that Gloucestershire had beaten Somerset by five wickets. The county score book represents something real, very real; but there have been stages of society when that sort of representation was not appropriate; when something palpable was necessary. In the economic sphere the score has to be as accurate as possible; in early times it had to be tangible and evident as well; but now the score book method has become appropriate for most of the game. The economic game is an immensely complicated one (and perhaps not altogether a very sporting one as understood by some of the players), so that we require also to have money of the counter variety or of the I.O.U. type to pass round among players who come little into contact.

Moreover in this economic game of unrivalled complexity, in a wider sense, in which money is sometimes a medium of exchange and sometimes a unit of account, firms keep their own score in the form of accounts, though outsiders check the entries; scores are added in from minor games played by the same club; and the residual scores, the winning margins or net profits, are split up among the founders, or present proprietors, of the countless clubs.

It is indeed a game of vast complexity and the score is kept in money; and money in any other form is of relatively small importance to-day. As one looks at the development of money, one may discern that its two parts, material and immaterial, have begun to reapproach each other. Early in its existence,¹ almost at ground level (if we may change the simile), the tree of money bifurcated, the one trunk being the medium of exchange and the other trunk being the unit of account. In recent centuries the main branch of the medium of exchange, overshadowing all its other branches, has grown aslant so that it is scarcely distinguishable, save to those who trace it carefully to its origins, from the twigs and leaves belonging to the other trunk, the unit of account.

¹ See also Chapter IV.

Money should be portable, durable, divisible, and recognisable.

We have inquired at some length what the nature of money actually is. It will be as well to consider before we proceed certain characteristics which money ought to possess. Here we shall be treading in the footsteps of Adam Smith himself.¹ There were urgent reasons why the sage of the eighteenth century should have asked himself what the nature of money should be. It may be true that the reasons are not so strong to-day. Yet some advantage may be gained perhaps from enquiring how our modern money appears when judged by the criteria in the mind of that great master.

We may consider our currency first. Wherever there have been conditions needing money, men have required to go from place to place in order to buy and sell. Obviously our copper coins alone would be too bulky to serve as currency. There have been cases of exclusively bronze and copper coinages in the past, however, which appear fantastic to-day. Thus the Roman *aes grave*, the precursor of the denarius, weighed originally about a pound avoirdupois. Large sums of currency were moved by cart. We find this more recent case also: "During the last century copper was actually used as the chief medium of exchange in Sweden, and merchants had to take a wheelbarrow with them when they went to receive payments in copper dalers."²

In modern times 'silver' coins would be excessively bulky too. Gold coins were certainly small enough: a pocketful of gold, or even a sovereign-case full of gold coins, represented a large amount of purchasing power. If we had gold coins to-day even at present prices this would still be true, for the sovereign of to-day would be slightly smaller than the half-sovereign of 1914, and a coin slightly less in weight than the old sovereign would be a £2 piece. Yet gold coins were rather easily lost, and indeed a half-sovereign to-day would be ridiculously small. In any case we shall certainly have no gold coins in circulation in the near future, so the matter may rest there.

Notes are very easily portable. At least this is true of our Bank of England notes. American one-dollar bills (i.e. notes), in this sense at least, can be rather a nuisance, and many Continental paper currencies leave much to be desired. Yet even if some countries' notes are better than others', the fact remains that for high value with small weight and bulk there is no sort of coin which compares favourably with our modern notes. And these have the advantage also that they can be sent by post easily and without formality.

It is obvious that money should be durable. The primitive kinds of money are mostly unsatisfactory in this respect. On the other hand, copper coins, and silver ones and gold ones with the small admixtures of alloy which render them tough, are admirably durable. Other metals are not so good. Nickel becomes dirty; aluminium, besides seeming somehow

¹ *Wealth of Nations*, bk. I, ch. iv.

² Hartley Withers, *Money* (1935), p. 20.

unsuitably light, wears more easily; lead would be too soft; and iron would rust; although, as Sir George Macdonald observed, "There are but few of the more familiar metals that have not at some time or other been made to serve as material for coinage."¹

Paper money too can usually be kept in good condition; and if a note does become stained or torn a bank will change it for a new one. If we need to keep a lot of currency on hand we usually put it in a fireproof safe, and for the rest ordinary care suffices.

But paper is not suitable for all denominations of money. This is clearly a question of the purchasing power of the note. For amounts so large as £1 or 10s. paper is durable enough. For an amount of \$1 paper is notably less satisfactory, though the American public quite evidently prefers its dollar bills to the silver dollar pieces (about the size of a crown) which would be in circulation if desired. Post-war inflations have provided many examples of notes for small amounts which were neither durable nor enduring. It is worth notice in passing that the convenient device of the slot machine calls for metal money. It also requires a somewhat free economic system. If our slot machines stand to-day as not very artistic and no longer utilitarian monuments to a vanished age, that is not for want of the metal money to work them nor by reason of the instability of prices, but because we lack a surplus of minor commodities to put inside them.

The divisibility of money is a twofold matter touching both the abstract and the concrete manifestations of money. On the abstract side, the unit of account should be easy to handle mathematically. We may be fond of traditional things in Britain, and it is seldom indeed that something spiritual is not lost in making a break with the past; yet it must be allowed that our pound made up of twenty shillings, and especially our shilling of twelve pence, and even our penny of four farthings do not constitute an ideal system. It is difficult to believe that we should lose any mathematical ability worth having if we could change to a decimal monetary system. The alteration would involve difficulties, it is true, and the serious economic conditions of the present are not those in which to add postponable complications to the activities of producers. Yet for some quiet time in the future, if we may permit ourselves so much optimism, the ways should be considered in which this change could be effected so as to involve the least disturbance.

On the concrete side the principle is clear enough. Our chief note should be somewhat large: there is, it is suggested, something of virtue in having a psychological bar against 'breaking into' a pound. Perhaps the dollar too is adequate in this respect. And we require names for the fractional notes and coins which are subsidiary to our chief monetary unit. Obviously we do not want a coin in circulation equal to 1s. 7½d. No doubt no coin of this value would ever be proposed, but such a situation could result if a coin were in circulation which fluctuated in value with the pound.

¹ *The Evolution of the Coinage* (1916), p. 37.

As to durability Adam Smith did not consider notes, and his thought regarding divisibility proceeded rather differently. He says of money: "In all countries, however, men seem at last to have been determined by irresistible reasons to give the preference, for this employment, to metals above every other commodity. Metals can not only be kept with as little loss as any other commodity, scarce anything being less perishable than they are, but they can likewise, without any loss, be divided into any number of parts, as by fusion those parts can easily be re-united again; a quality which no other equally durable commodities possess, and which more than any other quality renders them fit to be the instruments of commerce and circulation."¹ Nowadays we should consider loss rather from the point of view of profitability than from the physical standpoint.

Evidently the medium of exchange should be recognisable if it is properly to discharge its function. We might add as a minor and rather obvious point of a similar sort that coins and notes of any given value should be homogeneous. Many people still cannot recognise Bank of England £5 notes nor notes of higher values. Perhaps this does not matter very greatly, and anyhow, time, if not the price-level, will no doubt remedy the defect. We have almost forgotten now that when the Treasury issued £1 and ten-shilling notes at the beginning of World War I, there were at first occasions when a stranger who proffered them was viewed with suspicion; and that when the Bank of England took over the issue in 1928 and substituted its own for the Treasury notes, the same thing happened on a smaller scale, at least in remote districts. Perhaps we may fairly contrast these events with the skilful introduction of occupation currencies by Allied military authorities during World War II. On the other hand, during World War I in France quite small districts, townships and *arrondissements*, issued their own notes, which in neighbouring districts were often not accepted, the reason being, apart from fears of the possible deterioration in the value of such notes, that if all notes were accepted a man would find himself eventually the possessor of a proportion of forgeries. This is not an example of the failure of notes to be recognized during a transitional period, as were the earlier cases mentioned; it was an inconvenience lasting some years.

The case is similar with coins, of course. One shilling must be as good as another if prices are going to mean anything exact. It would be a poor coinage of which shopkeepers had to scrutinise the specimens offered to them to see whether any clipped coins were included; in the past these have caused inconvenience serious enough to limit appreciably the volume of trade. Again, it would not do to have some sixpences large and some small, so that shillings and sixpences could be confused easily. Nor would it be suitable to have some fifteen different devices on florins for example, since in that case forgeries and foreign coins would circulate more easily. Design, stamped on both sides, should be distinctive and should possess enough detail seriously to hinder the forger. Clearly, too, there must be a

¹ loc. cit.

smoothly working system, such as does operate in advanced countries at least in normal times, for withdrawing and replacing worn and battered notes and coins.

There remains a little point regarding the metals used in subsidiary coinage. Switzerland and the United States may be taken as examples of countries having good coinages not open to obvious criticism; yet it is contended that there is a small advantage to be gained from having coins of two metals quite distinct in colour. The British silver (even 'silver') and copper coins are not subject to the confusion which can arise between the Swiss silver and nickel coins or between the 'dimes,' 'nickels' and even the 'quarters' in the United States. And if there must be something besides and between 'silver' and copper, then some dodecagonal coin would seem to be a solution as good as any other.

The unit of account should be of suitable size.

We may ask ourselves also what the size of our unit of account, and therewith the purchasing power of our chief note, ought to be. Should it be as large as the pound or as small as the American dollar? We can say without hesitation that it should not be as small as the present French franc. But we have to bear in mind the convenience of decimal calculation.

Clearly we do not require a system making provision for a coin so small as to purchase no more than a single pin; which would be difficult of achievement in any case, for the value of the metallic content cannot continue above the face value of a coin in circulation. But we do require something having the purchasing power of about a halfpenny. Yet if we can arrange it, we want a system wherein the least coin is one-hundredth part of the unit of account, not one-thousandth: it is easier to think to two than to three places of decimals. Therefore at present prices, that is, making the assumption that present prices will continue approximately, there is more to be said in favour of the dollar than the pound.

We used to be proud of the pound sterling. Evidently there is something flattering to national prestige in having a unit of account and the corresponding coin or note of higher value than those of other countries. Perhaps it was suitable enough during the nineteenth century and up to 1914 to have the mighty pound towering above other units of account. But to-day (alas!) times have changed. Pride of nationality has to give way to the spirit of accommodation between nations, and our pound is among the severely wounded of two world wars. At a time when the momentous possibilities of Western European Union are before us, and some form of monetary convention could be of psychological and mercantile utility, perhaps we might ask ourselves with advantage whether the days of the crown are for ever over.

Money needs no longer to be intrinsically valuable.

There is one further question frequently asked regarding the currency. Should it be intrinsically valuable? The wording of the question is bad in

that it is both inexact and ambiguous; yet the matter is usually put in this way. Neither metals, minting, paper nor printing are free goods; therefore some intrinsic value the currency must normally have. What is really in question is whether the currency were better made from precious metals. This means of course from gold and silver, for platinum and other rare metals do not exist in quantities sufficient to be serviceable for monetary purposes. But even when some intrinsic value for the coinage is conceded the question is still ambiguous: for it can mean either that the coinage be full-bodied or that it be made of the precious metals without being full-bodied.

In a primitive society there is advantage to be gained from a currency of gold and silver, in that their value makes them readily acceptable either as coins or by weight, and because the knowledge necessary for their recognition is widespread. As we shall find,¹ difficulty may arise if the attempt is made to keep full-bodied coins of both gold and silver in circulation at the same time. In these circumstances full-bodied gold coins are to be preferred to full-bodied silver ones. The reasons given in favour of silver still hold good, however, for a silver token currency. Again, if the government of a backward country had discretion over the issue of notes, such having become the custom of the country, the temptation to pay its way by printing notes might prove too great to be resisted. Something of this sort has been happening in China since 1934; and lamentable have been the results.

The case of a developed country is more important in relation to the intrinsic value of the currency than is the case of an undeveloped country; since for the welfare of its people the former is more dependent than is the latter upon the monetary system. We should ask therefore whether the same reasons are decisive in favour of gold and silver for advanced countries. They are not. Despite ill-founded but lingering superstitions that the pound sterling has value because there is gold in the Bank of England,² there are no decisive reasons to-day why either gold or silver coins should be full-bodied. Gold we shall find³ is better in any case concentrated in the hands of the Central Bank. To keep silver ('real silver') in the shilling at a value of exactly 1s. (and similarly with other silver coins) would be a grievous and largely pointless task to-day. It is true that it would be agreeable of course to revert to a 'real silver' token coinage of the ancient right standard of England. Perhaps this is a matter about which we can suitably think when the balance of payments is no longer so pressing a problem; for the necessary stocks of silver would have to be imported, of course. Even then, and even if there were unemployment, we might find in considering the question that the same budgetary funds were better spent upon the housing or the health of the people.

As to the government of an advanced country exercising the prerogatives of sovereignty in relation to the note issue, it is suggested that it is better to make the assumption, not invariably borne out in practice indeed, that,

¹ See Chapter X.

² See Chapter VIII.

³ See Chapter X.

whatever may be the real merits of its monetary policy, none the less such a government acts to the best of its ability for the benefit of its nationals. Thus the path of wisdom will be to instil understanding in the minds of legislators rather than to seek to limit by a customary insistence on the precious metals the monetary powers of the government.

Bank deposits have important merits.

In two out of the last three sections we have been dealing chiefly with money in the form of currency. This is indeed a minor part of the medium of exchange in such countries as Great Britain and the United States. Between-whiles we have looked again at the abstract form of money, the unit of account. We must now return briefly to consider the bulk of 'concrete' money which we know under the name of bank deposits or cheque-deposits.

Bank deposits, by far the most convenient form of money for large payments, are portable up to any amount, in the sense that it is easy to carry a cheque-book wherewith to assign them to someone else. Consisting of nothing more than entries in the books of a bank, they are the most durable of all forms of money, since they possess no physical embodiment to be stolen or destroyed. Deposits are entirely homogeneous; they are more readily divisible than any form of currency, in the sense that cheques can be made out for their transfer to any amount, pounds, shillings and pence—though not indeed to halfpence. Finally they are not intrinsically valuable, since they consist of no intrinsic material. On the whole, then, they seem to be an ideal form of money; but we have omitted so far to comment on the obvious fact that they cannot be recognised at all: there is nothing to see. We do not even go into the bank and observe the record of their existence in the ledgers; and a pass-book is not a sufficiently certain guide as to the state of a person's account, since it could scarcely be kept up to date from moment to moment, and since it would be in any case too easy to forge. The trouble about the cheque-deposit system is that it requires the payee to place trust in the drawer. There are, of course, many cases in which that confidence will be forthcoming without the drawer of the cheque being personally known to the payee: where a man (acting for himself or for some organisation) is evidently in such a position that he would not issue a worthless cheque for the sake of a few pounds; where the issuer could have no personal advantage in drawing a worthless cheque; or where a man will not obtain what he is paying for until after the cheque has had time to be cleared, a case covering subscriptions in the widest sense. But there remains the fear of the worthless cheque, whether issued carelessly or with intent to defraud. This uncertainty, it would seem, will always limit the displacement of currency by the cheque-deposit system. A further limit is imposed by the fact that it would be a nuisance to make small payments, in shops for instance, by writing out a cheque. The fact that cheques do not as a rule circulate, but pass from the payee into cancellation via the banks, is an additional drawback. A certain amount of

circulating currency will be necessary for a long time to come. Cheque-deposits cannot serve as the only form of money; for the great range of payments, however, they are the most convenient form.

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CHAPTER III

THE SERVICES OF MONEY

Money is significant as a unit of account: it serves as a standard of value and exchange; as a common denominator for precision in calculation.

We found (in Chapter I) Prof. Harp speaking in a somewhat academic manner of real income, and Dr. Carp speaking in a more ordinary common sense way about nominal income. Considerations about real things have their uses, but if we were confined to matter of this sort, to the exclusion of nominal considerations, we should find ourselves limited very severely.

Prof. Harp could find, for instance, no precise way of comparing two men's real incomes; he could not give even a complete list of all the goods and services which each man consumed in a year. And this question of comparison is of supreme importance in many ways: upon it, to take one major example, depends the estimation of profit and loss, which is the guiding hand of capitalist enterprise. The process of comparison is made possible by thinking in terms of value; it could not be effected extensively in any other way. For these calculations of value we depend upon the unit of account.

Indeed, it is not too much to say that economic enterprise could not exist without using units of account. No doubt this is true to-day more than ever before; but even in the far past it was so.¹ The manufacturer who considers putting on to the market a new model of car must sit down and reckon in monetary units; he cannot set about the process in any other way; and if in modern conditions the monetary units had become wholly unreliable, he would have to invent or borrow others in order to carry on at all. So it would be throughout the greater part of economic life.

We describe the function of the unit of account by saying that money serves as a standard of value and of exchange. The expression means only this: that we express the value of everything in *the same* terms, the monetary units. Actually there is not one monetary unit for the whole world, of course, but many: pound, franc, dollar and so forth; but all these monetary units are linked together in the foreign exchange markets wherein every national money can be exchanged for any other in normal times.

Without using a concrete medium of exchange at all, we can often effect exchange in a satisfactory way if we make use of a unit of account capable of acting as a common denominator of value. For example, a farmer may want to buy a horse from a breeder. The breeder may agree to accept

¹ See Chapter IV.

payment in sacks of oats: for these there is a market price; the men have the horse valued and the amount of oats to be given in exchange is determined by the valuation of the horse and the price of oats. No money need change hands, but money has served as a unit of account to facilitate the transaction.

Cases of this general type have importance. Inheritors have often found that the way satisfactorily to divide among them the personal effects of the deceased is to have all the articles valued. The division is then accomplished in monetary terms. Here it is not a question of exchange in the normal sense but one of arriving at equivalents. If this is not exchange, it is a similar process, and the unit of account performs a typically monetary service for those who use it.

Again, two persons or two firms which are habitually indebted to each other for numerous items offset goods supplied against goods received, the balance being settled periodically by the transfer of 'concrete' means of payment. In the offsetting process all that is required of money is to act as a unit of account. Two banks offset cheques drawn on each in favour of depositors of the other in the same sort of way; but in England and elsewhere a local clearing is more complicated than this because there are always more than two banks. Precision in calculation is given by the unit of account.

It is not uncommon, too, for farmers in little-developed places, of which Southern Ireland is an example, to obtain from a general store the goods which they need. The shopkeeper maintains an account of what is owing: no money passes from hand to hand. When his harvest, or some part of it, is sold, a farmer is able to clear his debt. It may be that the storekeeper is also a dealer and buys the produce in season, or he may sell it on a commission basis, crediting the farmer's account with the proceeds. It can happen that for years at a time this system is used and that no 'concrete' money therefore changes hands: the service which money renders as a unit of account is sufficient for the monetary needs of such people. Again, the unit of account serves as a common denominator making for precision.

It might appear, indeed, that in the four examples given there is occurring the same process of keeping the score which we described the banks as undertaking. It is true that the farmer and the horse-breeder, the inheritors, the mutually indebted, and the farmers' store-keeper are all in a sense keeping the score. That is exactly what they are doing. But there is this difference: the score which the bankers keep is generally transferable in payment; the score kept by the others is not so used. The bankers specialise, indeed, in the adjustment of their figures so that one gains and another gives: in the other cases, claims are not transferred to third parties in settlement. Such claims would not be generally acceptable. So, at the urging of Prof. Harp, we must continue to call deposits as shown by the bankers' figures 'concrete' money or media of exchange; and, whatever Dr. Carp may feel, to say that in our four instances given money is serving only as a unit of account.

In general terms, if all goods are priced in the same units, that is, in money, then where bilateral exchange is to take place, and in some other cases, the use of media of exchange may be avoided or at least minimized: the unit of account is all that is required.

In a barter economy ratios of exchange fixed by custom, and rigid, could not go together with economic progress.

The only alternative to a system of indirect monetary exchange would be a regime of direct barter exchange. Apart from the great tedium of learning the value of every good in terms of every other, a system clearly inferior to the monetary one wherein all goods are expressed in the same terms, the decisive consideration must be urged that a system of fixed barter ratios, as known to exist in simple communities, could not coexist with economic progress. As methods of production improve, first one good and then another is produced more cheaply; therefore prices, determined in the short run by costs of production, must fluctuate; customary ratios of exchange could not endure. Transition in value relationships is brought about simply and comprehensibly by price fluctuation; in a barter regime fluctuations in value must produce grave dislocation and probably chaos. A vast barter market wherein all goods were dealt in at changing ratios is not a feasible system of exchange. It is worth a little space to point out the obvious conveniences arising from the use of money, undeniably a necessity in the modern world, in order to preserve some sense of proportion in the face of the criticisms of money to be made in later chapters.

Money is significant as a medium of exchange: it generalises purchasing power; and makes for full satisfaction in exchange; whereas barter requires coincidence; and is tolerable only when exchange is small.

Of the two chief functions of money, as unit of account and medium of exchange, the former is usually considered the more essential for modern society. But there is much to be said for the view that in less advanced communities the medium of exchange function is as important, if not more so; the conclusion depends upon the stage of development of the community of which we are thinking. For to reckon in terms of a unit of account is to think in abstract terms, an advanced type of thought. Thought about economic value is very much easier if the unit of account is identified with some concrete thing, like a pound note or a shilling. Then when we consider the value of some object, we can picture in our mind four shillings and can ask ourselves whether we would rather have the money or the object in question. Simple preference is a primitive habit of mind; it is a crude and fundamental way of thought, easily evoked among savages and other small children. The mental transition to a unit of account comes later, aided by the earlier condition wherein the medium of exchange is paramount.

It is a well-worn truth that barter requires coincidence in exchange. The impoverished student who desires to sacrifice his gramophone in order to get books can in his extremity obtain money for the purpose. His problem is different in kind in a barter regime: he must then find someone possessing the books who will accept a gramophone. It is one of the great virtues of money that it *generalises* purchasing power: with money in his possession, a man has generalised purchasing power wherewith to obtain anything within his means which he may require. He can buy a little of the produce of a hundred different firms if he wants to do so, or he can lay aside the money and save up for one big thing. To be given money in exchange is to receive the magic thing, which can be turned into any of the manifold things which money will buy. It is implicit in our definition that money has *general* purchasing power.

The use of money makes for full satisfaction in exchange. When we say this, we do not suppose of course that it is the same thing as saying that every indirect exchange effected through the medium of money is certain to be considered entirely satisfactory. Frequently we buy things which disappoint us. All that is meant by this expression is that there is no reason why we should buy things which we do not want, whilst it would be difficult in a large volume of direct barter not to acquire things which we did not really require. It is true that we might limit the number of unwanted and half-wanted things which we received by refusing to do a large volume of barter; but then evidently barter would become difficult to transact, and it would be hard for us to get the things which we really wanted badly. The use of money solves this difficulty.

Barter is tolerable then only in very simple circumstances, as in the case where an agricultural community marches with a pastoral tribe, so that surplus wheat can be exchanged for surplus sheep at almost any ratio to mutual advantage; or as in the case where two warriors agree to specialise, the one making bows and the other arrows in order to obtain a larger product for equal division. But as soon as the division of labour develops to a considerable extent, then money becomes necessary to facilitate exchange.

We may find another example of direct exchange in the recent past and among civilised peoples: many persons in remote places by reason of the exigencies of World War II found themselves carrying on barter. Cigarettes and tinned foods exchanged against fish, eggs, wine and other things to the satisfaction of personnel of the Allied forces and of local inhabitants of several countries whose money could not be used for the purposes of exchange. Indeed, in a certain part of Yugoslavia, to name only one instance, cigarettes began to acquire the attributes of money. It was interesting to observe that cigarettes were reckoned as such in exchange: British or American, of well-known brands or not, stale or fresh, they were all cigarettes and apparently equally acceptable. But clearly this was a transient method of exchange, and in a few years at least the last traces of wartime and post-war barter may be expected to have disappeared.

Cigarettes had the advantage of consisting of small units, and this is one

of the amenities which we require of money; for readily divisible monetary units make small purchases easy. We may imagine a future society in which our petty requirements are made free to us; until those days dawn we shall remain beneficiaries of the minor media of exchange for pennyworths of goods and services which it would be difficult to acquire by subscription.

Again, the medium of exchange serves us well in providing us with the means of giving gifts of a nature to be determined by the recipient. As a particular case of this sort we may observe the payment of taxes to the Government, which provides what it deems necessary and takes what it needs for the purpose by buying or hiring its requirements with money raised by taxation.

Money facilitates transactions over time, serving for deferred payments, and as a store of value; rendering capital mobile, and thereby aiding saving and investment.

Money greatly facilitates transactions over time. A man building houses may wish to assure his supply of bricks in advance, so that he will not have to wait for delivery when one house is completed and he is ready to begin the next. Perhaps he has agreed to sell the one at present in building for a fixed sum, which will enable him to buy more raw materials; but he will not get this price until the present house is ready for occupation by the prospective owner. He therefore orders bricks for future payment and future delivery. What could he do if there were no money? The value of the sum of money agreed in a future contract can be assumed with tolerable accuracy to be stable; when there is confidence in the value of the future payment to be received, then dealing is easy. Dealing would not be easy if a man offered to his suppliers some ordinary commodity as future payment, because the value of the commodity might change significantly in the interim. The cases in which money serves for deferred payments are immeasurably numerous.

In the system of barter there is no interval of time: the action which 'sells' one thing automatically 'buys' another in exchange. It is otherwise with money; for, when a thing is sold for money, the seller, receiving the money, may not at once spend it. A very small length of time *must* elapse; quite an appreciable one is very usual; and the interval may be quite easily of long duration. If this interval between receiving and spending money is months or years in length, we look upon it as something different from a short lag, and call it saving or hoarding.

If a man consumes less than he produces, then clearly he has something to save. What is the best medium in which to store his savings? A man might hoard food, but that is difficult because much food is perishable, and the proper storage of perishable foods is costly. Money is often the best medium in which to keep savings, for a great part of ordinary saving is done with a view to providing against some unknown contingency. Its purpose is security. Because we do not know what trouble may arise, but

only fear some untoward unknown, we do not, of course, know what sort of things it would be wise to lay aside for the rainy day. If we lay aside money, we shall have something which we can assume to be convertible into anything which we may want when the rainy day comes. Money, then, is often a suitable store of value for the man who provides against future trouble.

It is true, of course, in a modern community that money is not the only store of value to which people turn naturally in order to make provision for an uncertain future. More particularly if the savings are large, men's thoughts turn towards the purchase of securities of some sort. In buying stocks or shares the motives of the purchaser may be mixed: he may desire the income expected from interest or dividend; he may also hope to enrich himself by capital appreciation; but one of the investor's strongest motives, it is believed, is still to achieve a margin of security. Thus, while making a reservation in favour of stocks and shares which are easily saleable, we may still say that money is in general superior to goods as a store of value.

But in this respect there is a further point: we may say with confidence that the great mass of existing securities came into being as a result in part of the use of money; the existence of money was one of the conditions for the creation of securities as we know them; in a barter regime such large-scale investment could not have been brought about. Thus if money is not itself always the ideal store of value, the stocks and shares superior in this respect owe their existence to money: the desire of men to store value is satisfied either directly or indirectly by money.

Investment was possible on a small scale even in the days when savings consisted of 'much goods laid up for many years.' A rich man might pay food to employees, but few would possess savings sufficiently large to make such a proceeding worth while. Small savings would tend to be nothing better than sterile hoarding, food and other things stored away barrenly for the future.

Money is more mobile in investment. Now there are such things as post office savings accounts, a large number of independent Savings Banks, and even the big Joint-Stock Banks make provision with money-boxes for mobilising the smallest savings, shillings and pennies; for, when the banks get the money, they use it. An organisation for mobilising savings in the form of concrete goods could not be so efficient as this, so that capital (for savings are capital) would lie idle, which would be a waste of resources such as a poverty-stricken world cannot afford.

But over time money has its imperfections; and any durable good may serve as a link between present and future values.

In conclusion it is perhaps wise at this early stage to point out one of the characteristics of money which is from some points of view a serious shortcoming. The value of money is not stable over time. By the value of money we mean what it will purchase; the value of money is the reciprocal, or inverse, of all prices. This value may go up or down. We

think of the value or price of other things as changing, but the value of money most people think of as fixed and unaltering. It is not so. The value of money changes, and for that reason it may prove a poor medium wherein to keep savings. But the value of money usually changes only slowly, whilst the prices of most things have changed, during their history, often rapidly by large margins, and may do so again at any time. Hence even in its shortcoming as a store of value money is nevertheless superior to other things.

When thinking of value over a period of time, we should remark that it is the durability of valuable things which links the values of to-day with those of the future; this means not only that present values will influence and help to determine future ones, but also that the values or prices which we *expect* to rule in the future will influence present ones. The durable thing which normally supplies this subtle link between present and future is, of course, money. But, as Lord Keynes observed,¹ any durable asset may possess this and other attributes of the highly organised money of modern times; so that we must not suppose that the link between present and future is something which is found only in an advanced society equipped with a fully developed monetary system.

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CHAPTER IV .

THE ORIGINS OF MONEY

Some authorities hold that money came into existence as a unit of account; that it grew from customary ratios.

As the struggle has swayed back and forth between those who would give a wide and those who would give a narrow definition to money, so another battle has been waged, in part over the same ground, between those who see money in its dual nature to have sprung from a primitive unit of account, and their opponents who contend that money developed from a simple medium of exchange.

Details of the earliest coins are believed to be well known; but money as we have defined it in the sense of the means of valuation and of payment is older than coinage; and the origins of money, the records of the first valuations and payments, are lost in the mists of antiquity.¹ The historical truth has not been established, and there seems little probability that it ever will be, unless the future develops methods of research as yet unimagined. The unique origin of money, if there be one, is thus a speculative subject.

It is generally agreed, however, that before money of any sort existed, exchange took place. After an exchange had taken place to the satisfaction of both parties, the occasion was likely to arise again when mutual advantage would accrue from a similar transaction; probably the same commodities would be in question. What then could be more natural than that the same terms of exchange be employed again? Man, resembling in this respect the lower animals, has nearly always found reference to precedent easier than original thought. In contemplating a second exchange of skins for wheat, what would be in the minds of our primitive ancestors? Naturally the earlier occasion of exchange. Thus terms of exchange tended to crystallise; and when the occasion came to pass that a man was thinking of the exchange made before not by himself but by his father, then the terms of trade tended to become not only customary but traditional, almost sacred.

This picture fits in well enough with what we know of man in general and of primitive man in particular. There is also a certain amount of evidence, seldom considered adequate or conclusive in itself, to the same effect derived from early civilisations. The indications are not entirely satisfactory that there existed, as some have claimed, a network of customary ratios covering all goods normally exchanged, the value of each good being known in terms of all others. Nevertheless, something of this sort may have been common, with local variations, within primitive societies in normal times.

¹ cf. J. M. Keynes, *A Treatise on Money* (1930), vol. I, p. 13.

The contention of those who find money to have appeared first as a unit of account is this: reckoning his wealth of various sorts, a man would express the answer, let us say, in cows; he applied the customary ratios and so was enabled to arrive at a total in terms of cows. Furthermore, in the primitive conditions of those early times, before the existence of towns, exchange was not common: it would be tedious and of little service to a man to keep in mind a large number of customary ratios: cows in terms of bear skins, apples, wheat, arrowheads, etc.; bear skins in terms of apples, wheat, arrowheads, etc.; apples in terms of wheat, arrowheads, etc.; wheat in terms of arrowheads, etc. Much more simple was to remember in terms of cows all the goods traded: then, if it was required to exchange wheat for bear skins, twenty measures of wheat exchanged for a cow; ten bear skins exchanged for a cow; therefore two measures of wheat exchanged for a bear skin. The cow had become the unit of account.

It is evident that customary ratios leading to the development and the use of a unit of account could endure only in a static society or in one nearly static. But it is known with certainty that, in some senses at least, that was precisely the nature of early civilizations. Furthermore, there must have been in early times a great incentive towards the institution of customary ratios and of the unit of account; for such a development would bring a great increase in personal, that is, in family, security. If by reason of particular misfortune the winter supply of grain for a family were depleted, at the sacrifice of something else, not necessarily the money-cow itself, the deficiency could be made good; thus starvation or serious deprivation could be averted.

Moreover, so long as the customary ratios held, this additional security was known to exist beforehand. It might seem at first that a family possessing any wealth would be able even in a pure barter society to sacrifice other goods for the necessities which it lacked. But at what ratio of exchange? In the absence of customary ratios the exchange might well be an extortionate one. The security would be the more real and certain if custom dictated the terms of exchange. This is, of course, the case of particular shortage affecting one family, not the case of general shortage to which we must return a little later.

One of the cases calling for reckoning among simple peoples is to be found in a brief look at tribal customs. In the case where a man died and a portion of his goods therefore became forfeit to his chief, the value of the estate could be reckoned in terms of the money-cow, or in whatever the money-good might be, and the amount of the forfeit could be estimated with tolerable accuracy and paid in any convenient form. This procedure avoided such formidable difficulties as the chief becoming possessed of one-tenth of a cow; and one-sided transfers to tribal chiefs are not uncommon in payment of taxes and fines. Some writers have sought to show that among certain primitive peoples to-day the method of reckoning value in terms of some single thing is prevalent, the thing used generally being a cow or something of the sort; and these writers make the point with

emphasis that the money-cow is used quite abstractly, the chief's tribute being paid in all manner of things, with the cow serving only for the calculation. But this system, as must be expected, is not in use widely, and some of the instances given do not appear to rest upon very certain evidence. We may say, however, that there is at least no contemporary evidence to disprove the unit of account theory of the origin of money.

We have seen that it is simpler to use a unit of account than to remember numerous barter ratios. We have noticed too that the desire for security provides a reason for the development of abstract money. Taking a view down the long passage of time, moreover, we should observe that the unit of account facilitates exchange.¹ Once exchange had become at all extensive, that in itself supplied a powerful stimulus to the growth of money; no doubt the benefits of specialisation in production, or the division of labour, were obvious, and it seems to have been realised in very early times that exchange was the necessary counterpart of specialisation.

What then is to be said against the theory that money appeared first as a unit of account? At the moment only this: that in assuming an institution of customary ratios, a system which never or very seldom changed, the theory is capable of attack. Is it likely that, if wheat had become the money-good, men would continue to think of twenty measures as being worth one cow during a year in which there was a bumper crop of wheat and a cattle plague? Or suppose that there were wet wheat harvest and a record apple crop (which is not unlikely in some parts of the world): what happens to the customary ratios? Apples would be rotting unwanted on the ground and there would not be enough grain for winter: do the customary ratios hold good? Surely it is doubtful.

The defence by the proponents of the unit of account theory seems to be that in abnormal times exchange did not take place. But abnormal conditions in primitive societies are those often enough which call imperatively for exchange: the alternative is likely to be starvation. So we must pass on with certain doubts and reservations in mind respecting the unit of account theory of the origin of money.

Others find that money began as a medium of exchange.

The second theory of the origin of money is the more widely held. Its adherents maintain that some article gradually became a medium of exchange: that is, some good became acceptable without question because any man receiving it knew that he could offer it successfully to others whose produce he wanted or might want. Rice may serve as an example: in the countries where that is the staple food, rice was in early times accepted in exchange for anything else, for everyone wanted rice. If a man should accumulate more rice than he wanted, then he could afford to exchange the surplus, let us say for a pair of simple shoes, for the shoe-maker would gladly accept payment in rice, for that was his staff of life. We may say that rice became money because it was generally acceptable;

¹ See also Chapter III.

it had become generally acceptable because it was the staple food in places where undernourishment rather than superabundance was the rule.

If rice was suitable for a medium of exchange in one place, the suitable thing might be cows, knives or wheat in another; indeed, we have already seen¹ that all manner of things may serve as money. As Prof. Roll says:²

In the very beginning of indirect exchange we find, therefore, money consisting of a commodity which, in the given circumstances, possesses a special significance for the community: cattle for nomadic tribes, hides for hunters, etc. They are commodities which stand high in the estimation of the majority of the members of the community, and possess great value.

Moreover, we have noticed already³ that abstract reckoning is in itself something difficult; it is not the sort of activity which may reasonably be expected to take place on a large scale in primitive societies. The Classical Greeks, after all, who made such astonishing progress in abstract thought, were living in an age perhaps half-way between the present and the time when money originated; and they were so exceptional in their abilities that well over two thousand years later they rank still among the intellectual giants. Can we readily believe, then, that the abstract cow, the pecuniary *pecus*, led mankind along the path to Lombard Street?

If this argument is acceptable, its importance must not be exaggerated. Reckoning wealth by abstract means is not a highly advanced form of abstract thinking. Yet even Abraham, who gave "four hundred shekels of silver, current *money* with the merchant"⁴ for the cave of Machpelah, had his wealth described as "flocks and herds, and silver, and gold, and menservants, and maidservants, and camels, and asses";⁵ no attempt being made to express the whole fortune in shekels of silver as a common denominator, though no doubt an impressive weight of silver could have been reached for a man who had been gathering wealth for nearly "an hundred threescore and fifteen years."⁶

If early man was suspicious (and why should he not be?), what would be more acceptable for his litter of pigs: so many knives' worth of rice or so many knives; so many cows' worth of wheat or so many cows; so many skins' worth towards the purchase of a wife or so many skins? Would he be sure that the knives' or cows' or skins' worth was honest as a measure? We may deem it doubtful.

✓ *Both views may be correct.*

Now it might seem right to ask which of the rival theories in this speculative field of investigation is thought to be correct. But is there necessarily any conflict between them? It might be that money rose from the unit of account in one place and from the medium of exchange in another. It might be that the first money arose from customary ratios of exchange, but that these were overthrown by disaster, bringing to an end

¹ See Chapters I and II.

² E. Roll, *About Money* (1934), p. 31.

³ See Chapter III.

⁴ Genesis xxiii.

⁵ Genesis xxiv.

⁶ Genesis xxv.

in their downfall the unit of account to which they had given rise; that in the same place money grew up again from a commodity accepted universally in exchange. If this be right, which is the original money, the unit of account or the medium of exchange? It might well be for example that the first money in Africa was abstract money, the cow serving as a standard of value or means of valuation; whilst in China rice (or knives) served as a medium of exchange or means of payment before the days of abstract reckoning. If these two origins were independent, and we might therefore accept them both, then it does not matter particularly which came first chronologically.

Indeed, it may be permissible to imagine that the two processes grew up side by side: if parties to a bargain possessed excess stocks of the acceptable thing, then it could be used as a concrete medium for their transaction; if they did not have such stocks, then they had to calculate how their exchange would have been arranged if they had had stocks of their money-good; in the second case they would be confronted with the more difficult task of reckoning barter values from agreed prices in terms of rice, wheat, cows, knives or whatever was their medium. But in times of fluctuating supply these agreed values would be difficult to settle, and the concrete transaction, with the medium of exchange actually being given from one party to another, would be the rule.

In very difficult days, in any case, the monetary system, in primitive times as at present, probably broke down. If there were a famine where rice was both the staple food and money, non-food prices must have crashed, and it would seem that the community must have been driven back to barter because of the desperate need for procuring substitutes for the normal diet.

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CHAPTER V

SOME NOTES FROM MONETARY HISTORY

The precious metals were used as money in early times.

THE aim of this chapter is very limited. It is hoped to do no more than to sketch in quite lightly a little of the historical background against which the moving scenes in the modern drama of money have been played. It hardly needs to be said that the history of money has been fraught with difficulties. Happy would be the economic institution that had no history! Yet there is something to be gained perhaps in touching briefly upon these troubles, lest we should come to think that the abuses of money were a recent development due, along with so many other griefs, to the signal lapses from grace of twentieth-century industrial man. The purpose will have been fulfilled if this very brief account indicates progress in the growth of an economic institution powerful for good as well as for evil.

The metals are believed to have been discovered by man in the following order: first gold; then copper; then silver. Iron and other metals came later. The reason is not hard to find: gold and copper were discovered in their natural pure forms in or near the Mediterranean lands where the majority of the early civilisations flourished. By comparison even silver was a late-comer depending upon the development of metallurgical skill to refine the precious substance from the ore. Thus we find silver to have been more valuable than gold in Egypt in the second millennium B.C., a time when gold and copper had long been in use as money by weight or by linear measure both there and elsewhere.

The role of copper became subsidiary by reason of its relatively great supply; so that gold and silver emerged and remained as monetary substances, having displaced other commodities for reasons which we have considered,¹ and continuing long to be preferred to other substances including the various other metals as the progress of skill rendered these available to man.

Yet if we say that, apart from their inherent attractiveness, their scarcity was the reason why gold and silver were esteemed above all else as money before the days of coinage, and before the time when they were found to have other virtues which we have noticed,² we must be clear that they were scarce in the right sort of ways. Nowhere were there in existence great hoards of gold or silver having little value in exchange; yet the precious metals were not so scarce that a few grains of either would have sufficed to provide the necessities of life for a family for a year. From no

¹ See Chapter II.

² See Chapter II.

known source, far or near, came an abounding supply such as might have seriously deranged established market values; yet there were available resources sufficiently productive to stimulate and to support a growing volume of trade in peaceful times. We may say then that gold and silver possessed the right degrees of scarcity to serve as money.

There seems indeed to have been a period of disturbance of the monetary values in the history of Israel when silver "... was nothing accounted of in the days of Solomon,"¹ but we may fairly suppose that there is an element of exaggeration in this account. Before the first millennium B.C., to which this report belongs, gold and silver had become established as money in Egypt, Mycenae, Crete, Hither Asia and India; and before the dawn of the Christian era they had spread throughout the lands bordering the Mediterranean, and beyond India to other parts of central Asia where civilisations were growing up.

Some variations in the ratio between gold and silver occurred indeed, some peoples showing wisdom in dealing with this problem, as the Classical Greeks did, by permitting the two metals to fluctuate in relation to each other while both remained in circulation; and some authorities making the natural and excusable error of supposing, as the Persian kings did, that the sovereign power could successfully decree the ratio at which the metals were to exchange.

In China the beginnings of money were highly complex. Gold, silver and copper were used as early as the second or even the third millennium B.C.; but in that large country the use of the precious metals did not predominate as it did elsewhere for the reasons that they were too scarce, that there was a very strong demand for them, and thus that small transactions could not be effected conveniently by their transfer.

Coinage was the first great invention in the history of money.

Coinage seems to have had at least three separate origins: in the eleventh century B.C. in China;² in Asia Minor at the start of the seventh century B.C., according to Herodotus, who states more precisely that it was in Lydia, and not in Ionia as other authorities have held, that the first coins of which he had knowledge were struck; and in India in the fourth century B.C.

Lord Keynes has claimed³ that a more important landmark in the history of money had been passed long before when the State made its first incursion into monetary matters by defining the quantity and quality of metals which should correspond with the units of account in use. And indeed, this was an event of importance which should not be neglected, as will be testified by the considerable space which we shall have to devote to the activities of the State in the monetary field and to the consequences of these actions.

Yet the invention of coinage was something of contemporary moment

¹ 1 Kings x.

² See Sir George Macdonald, *The Evolution of the Coinage* (1916), p. 9.

³ J. M. Keynes, *A Treatise on Money* (1930), vol. I, p. 11.

and of lasting significance. We can perceive from the rapid spread of minting throughout the Mediterranean lands in the seventh century B.C. that the coins satisfied an urgent need; and our own coins are the direct descendants of these early forebears, in the sense that the idea of coinage was known and examples of earlier issues were available at each new emission of coins up to the present time.

Not even in the Dark Ages which followed the collapse of the Roman Empire did coins disappear entirely, not even in Western Europe. It is true that in these centuries gold coins took refuge very largely in hoards, partly because lawlessness flourished in the absence of any strong government, and partly because the value of gold was raised inordinately high by reason of a failing supply, so that the physically smallest gold coins tolerable for transactions would have been unduly great in purchasing power. In other words, gold became too scarce.

Thus the Middle Ages found Western Europe attempting to employ silver coins, with subsidiary copper ones; and struggling against that ingenuity which men exercise in order to defeat their fellows, the community and ultimately themselves.

*But private malpractices impaired good coinage: clipping and sweating;
forgery; picking and culling.*

Yet the struggle for a good coinage was evidently worth while. The reasons were clear for using coin rather than the precious metals measured for the purposes of transactions by weight: among honest men time was saved and trouble in identifying genuineness; a stronger reason, however, for superseding the older method lay in the possibility of sharp practice which it had offered, both in respect of quantity and of quality. But the difficulties of coinage have been formidable, and their satisfactory solution has been found only in comparatively recent times.

The clipping of coins, that is, the paring off of small pieces of the valuable metal, started early in the history of English coinage; by mediaeval times this abuse and the kindred malpractice of sweating (usually meaning an abrading of the flat surfaces as opposed to the edges of coins, but sometimes meaning the washing of coins in acid to remove part of the metal) had become serious factors preventing the growth of commerce.

Not only did the ever-present and ineradicable clipper himself damage the coinage; he also paved the way for his fellow, the forger, whose activities would have been narrowly circumscribed in trying to counterfeit sound coins. The process of cutting the edges of coins like the surface of a file, which is known in this country as 'milling,' was first used in England in 1561, but was abandoned for trivial reasons, and not reintroduced until 1662. This, together with other improvements, gradually reduced the malpractices to negligible proportions.

Another abuse was checked at the same time: merchants making large payments, especially to creditors abroad, could not, or for the sake of their good names would not, pay by tale (counting the coins) with the light

money current: that is to say, if a merchant owed two hundred florins, he did not proffer two hundred florin pieces, because these would in general be deficient in metal content; instead he multiplied the weight of precious metal supposed to be contained in one florin by two hundred, and weighed out metal accordingly; actually the metal which he used would probably be the worn current coins, of which he might require perhaps two hundred and thirty-five properly to discharge his debt. But small payments, especially those to men of little consequence in the mercantile community, could be made by tale; ill-feeling was aroused, but not without a motive; for merchants selected the light coins to pass by tale, and reserved the newer and heavier ones for their payments by weight, or to melt down for exportation or for use by goldsmiths or silversmiths.

This practice, known as 'picking' or 'culling,' was too profitable and too hard to detect for successful prohibition; and it was realised gradually that the remedy lay rather in improving the coinage and in maintaining it at such a standard that the illicit profit could be made no longer.

It was not, of course, the shady profits made from the currency which angered the royal ministers so greatly, but the fact, only slowly realised, that new full-weight coins put into circulation promptly disappeared into the melting-pots of silver exporters, so nullifying all attempts to improve the coinage.

Abuses by monarchs were less significant in the end than their remedial actions: free and gratuitous coinage.

Comprehension of the reason for the disappearance from circulation of good new coins was enshrined by Tudor times as a principle, improperly attributed to Sir Thomas Gresham, an Elizabethan merchant and government agent, and known as 'Gresham's Law.' The principle was expressed in the terms: "bad money drives out good, but good money cannot drive out bad"—the bad being, of course, the worn and clipped, and the good being the full-bodied money. But Gresham's Law has a wider application, as we shall see.¹

Not all the gains from the coinage, however, were made illegally, for the Government itself was able sometimes to reap a profit. The right of coining the precious metals belonged to the State (except in pre-revolutionary France), which very reasonably charged the cost of minting to those who brought their metals to the Mint; but, over and above this charge, called 'brassage,' the sovereign frequently exacted a further payment, 'seigneurage,' the amount due to the Lord for allowing minting facilities. At various times in different countries seigneurage was raised to exorbitant heights, falling as a tax upon those who required to have their metals minted. The importance of it lies not in its success as a tax, for it was a failure, but in the incidental effect that it kept metal away from the Mint, so assuring a serious deterioration of the coinage by honest attrition and by forgery, clipping, sweating and culling.

¹ See Chapter X.

Once in a long while the State would try to mitigate the evils arising from bad currency by ordering a total re-coinage: the old coins were to be delivered to the Mint by a specified date; and there was every reason why they should come in, for not only would their owners receive better coins instead, but also the legal tender status of the worn coinage might be taken away. Now it was impossible to collect all the old coins in circulation before issuing the new ones, since this would leave the country without the necessary medium of exchange for a period which would be long because of the slowness of communications. So the attempt was made to issue new coins as fast as the old ones were taken in, which was an expensive operation possible only to peaceful kings whose treasuries were full. And, of course, the attempt failed, because the new full-weight coins disappeared from circulation as fast as the Mint produced them, by reason of remelting or export. The sharp-witted and unscrupulous goldsmiths and silversmiths particularly profited at the expense of simple kings.

But even in the Middle Ages the power of the State to regulate the quantity of precious metal in a coin was called in to remedy the chronic monetary debility: new issues were made of coins approximately as light as the average coins current. This strategy usually proved reasonably successful, and it had the added advantage of being less costly to the State.

Indeed, lighter issues opened up an unsuspected source of revenue for needy monarchs (notably for Henry VIII in England), who issued coins containing a proportion of base metal, a harmful method of raising money, known as debasement. The proportion of base alloy in coins was wont to grow in this way until the condition of the coinage reached the point at which drastic remedy was urgently necessary: the remedy found was a combination of re-coinage with an official 'calling-down.' When coins were called down, they were made by royal proclamation to pass in payment at an amount less than their pre-existing face value, and they were accepted for re-coinage by the Mint at, or often at rather under, the value of their metal content. Citizens were liable to wake up one morning and find that their sixpences had become fourpences by royal proclamation. In any case those of the old coins which continued to circulate while re-coinage was in progress would command only the value at which the Mint or the tax-gatherer accepted them, there being, of course, an excess of them in circulation.

The expedient of re-coinage accompanied by an official calling-down was adopted successfully by Queen Elizabeth, to whom it actually yielded a profit. It is doubtful, however, whether the coercive organization necessary to ensure success could have been created in earlier times.

But improved currency, in England as elsewhere, did not remain good. By the middle of the seventeenth century, after the disorders of the Parliamentary Wars, further remedial measures were necessary. In 1666 the coinage of both gold and silver was made free and gratuitous; which is to say that either metal was accepted in unlimited quantities for coining, and

that the owner was charged neither brassage nor seigneurage for this service. The purpose of the measure, to supply to the people an adequate stock of full-bodied coins of both metals, was achieved as to only half: the gold came for coining and an adequate gold coinage, the first guineas, resulted; whereas at the market prices prevailing it did not pay to take silver to the Mint.

After the Napoleonic Wars, official recognition was given to a state of affairs which had existed for a hundred and fifty years: free coinage of silver was discontinued, and limited quantities of smaller silver coins, whose face value was greater than their metallic value, were issued, with the property of acting as legal tender up to amounts not exceeding £2 (so becoming token coins). England had adopted the Gold Standard, an example which all important countries were to follow during the latter part of the century.

The second great invention was credit: the bank note, the cheque, the Treasury note, the bill of exchange.

We may say broadly that credit money developed as a result of the attempt to bring relief from the risks and irritations inherent in dealing in bad coinage.

Primitive credit institutions actually predated coinage in the Mediterranean civilisations, notably in the Assyrian Empire early in the first millennium B.C. Later the Greeks and Romans developed systems similar to some of our modern devices, but it is better to touch upon these beginnings a little later.¹ In the Dark Ages such refinements disappeared; and when we find essentially the same developments taking shape in mediaeval times, this really represents a new beginning owing little or nothing to the pioneering work of bygone ages.

Naturally, it was in the great commercial centres of the Middle Ages, for example, Florence, Venice and Amsterdam, that the new credit began to flourish. England, which was not of great commercial importance until later, did not develop banking, as distinct from extortionate usury, until the seventeenth century, a time of great dislocation in the coinage. Here, goldsmiths and silversmiths sought deposits of coin, at first for purposes of culling. To begin with, their deposits came in large part from persons called scriveners whose profession it was to keep the accounts of merchants, and to take charge of large amounts of their coin. The scriveners, concerned only with the tale of the coins, were not averse from lending their clients' funds to goldsmiths who offered interest as an inducement. Gradually the scriveners disappeared, because merchants began to deposit directly with the goldsmiths for the sake of the interest. But scriveners had not been the only source of goldsmiths' deposits: there had also been those willing to deposit their money without interest, at first even paying a safeguarding charge to those whose strong-rooms and guards gave a welcome feeling of security.

¹ See Chapter VI.

The goldsmiths gave receipts to their depositors. Soon the necessity was circumvented of going to the strong-room, taking out the money, and handing it over to someone else: the space on the goldsmith's receipt for the owner's name was left blank, so that a merchant could fill in his creditor's name; this expedient saving valuable time. An improvement followed quickly: instead of leaving the space on the receipt blank, it was filled in with the word 'Bearer,' in order that *anyone* who took the receipt to the goldsmith could obtain the coin. This was better than the blank receipt, since it could pass in payment among any number of people, and not merely between two. The receipt had become a bank note and the goldsmith a banker.

The goldsmith found that his notes circulated on the average for a considerable time, so that a large quantity of other people's money lay always in his vault: it had become safe to issue notes for an amount greater than the quantity of coin possessed, giving out the additional notes not as genuine receipts but as loans at interest; for the goldsmiths counted on being able to encash the additional note-money thus created with somebody else's coin. Since no one would suppose that the wealthy goldsmith, whose notes he held, would not be able to encash them when required to do so, there was no reason to doubt the value of this convenient paper. The system grew; the mercantile world benefited doubly: the genuine depositors because the goldsmiths paid them a small rate of interest on their deposits, and others because they were able to borrow at a higher but not an excessive rate what served as well as hard coin. All benefited from the fillip given to business by the new money. And many goldsmiths gave up their former craft to concentrate their energies upon the more lucrative activity of creating credit to lend at interest.

Notes were not the only form of credit: about the same time the cheque-deposit system began. A merchant, instead of making payment with a goldsmith's receipt-note, wrote a letter to his banker asking him to pay his creditor a stated amount; such a letter had the advantage that it could require payment of any odd amount, whereas notes were commonly made out in round figures. Soon the letter was phrased in a very few words, and later it came to be written on forms supplied by the bank in a cheque-book. Further, instead of himself going to collect the money from his debtor's bank, a payee arranged that his own bank should take charge of the cheque and collect the coin due.

Instead of making a loan in the form of notes handed to his customer, a banker was able to loan him a cheque-deposit, either by crediting his account with a specific sum or by making available overdraft facilities.

Bank notes are not the only sort which circulate as money: the government of a country can also issue notes, either with the guarantee that it will give coin in exchange to any note-holder who requires it, or without such a guarantee; these two kinds being called, of course, convertible and inconvertible notes respectively.

Now to print a large quantity of inconvertible paper money, wherewith

to meet their various expenses, might seem to bankrupt monarchs to be an easy salvation, and far more efficacious than tampering with the coinage. In fact it has proved usually to be a disappointing expedient, and one so transparently fraudulent as to be difficult to put into operation in times when men have not become besotted with the worship of governmental power. Nevertheless government issues, usually known as Treasury notes, are not uncommon, though there had been few before the French Revolution.

Finally, there is an instrument called a bill of exchange. This might be described as the reverse of a cheque, in the sense that it is drawn by the seller on the buyer. It is usually sent to the buyer accompanied by documents which will give him possession of the goods sold. When the buyer receives it, he may do no more than sign it, undertaking thereby that he will pay it; for these bills, or drafts as they are also called, though they may be payable at sight like a cheque drawn on a bank, are more commonly payable after a lapse of time, so that the buyer may in the meanwhile process and resell the goods or retail them. The lapse of time is usually thirty, sixty or ninety days, and during this time, which is called the *usance* of the draft, the buyer pays interest in one way or another on the amount of the bill.

Some drafts entitle the buyer to take possession of the goods when he accepts, that is, when he promises to pay on the due date by signing the draft; these are known as D/A drafts, D/A meaning 'documents against acceptance.' Other bills are drawn D/P, or 'documents against payment,' so that in this case the buyer is liable actually to pay for the goods before he gets them.

Now what are these documents which entitle the buyer, or drawee, to obtain the goods which he has ordered? They are commonly a bill of lading, a commercial invoice and an insurance policy, though there may be several other documents in certain instances. The bill of lading is a form of receipt given by a shipping company to the owners of goods sent by sea; the invoice is a list of the goods with their prices stated and sometimes a list of the charges incurred in sending the goods to the buyer, though sometimes a seller will have quoted a price inclusive of all shipping and insurance charges, and occasionally of interest charges as well; and the insurance policy is, of course, to cover the risk of loss or damage in transit. The buyer needs the bill of lading in order to be given the goods when they arrive at the place where he lives; the invoice tells him exactly what has been sent without the need of undoing the packages, and also indicates the value on which he will have to pay duty if the goods are subject to an import tax; and the insurance policy is sent to him obviously so that he may claim, if necessary, and have the damage estimated by insurance agents who are to be found in all ports.

Bills of exchange in a rudimentary form are as old as classical times at least, and have been used in some international trade for almost as long. A modern London merchant, having drawn a bill, usually takes it to his

own bank or to a bank specialising in a particular foreign market, which will buy it from him at a discount, that is, at slightly less than the face value; for the bank is virtually making him a loan with the bill as security that it will be repaid, and on such a loan as on any other the bank must earn interest; so that discount is only a name for interest calculated in this special way.

When a bank discounts a bill in this fashion, it sends it to its branch in the place where the buyer lives, and it is this branch which actually presents the draft to the buyer for acceptance. If the bank does not possess a branch at the place in question, nor a 'correspondent' which does such work for it, then the bank must sell the draft, at a slightly smaller discount, to another bank which does possess a branch or a correspondent in the buyer's locality.

If the buyer should refuse to accept the draft, which is a rash thing to do without reason for those who value their good name, the drawer of the draft (the seller) becomes liable to reimburse the bank which has bought the bill at a discount; similarly if the buyer has accepted the draft but finds himself unable to pay on due date, an unfortunate event which is more particularly likely to happen if the draft is drawn on D/A terms. But if the holder of the draft is a second bank, which bought it from the original discounting bank, then the first bank in the transaction must reimburse the second, so that the latter is very certain of getting its money back. Possibly, however, the first bank may lose: it demands repayment of the refused or defaulted draft from the seller; but the seller may possibly go bankrupt at that time. It is because the security of the second bank is thus the better that it cannot secure so large a discount as the first bank obtains.

It may seem that there is little point in drawing a D/P draft over a period of time which may be as long as three months. But in two different ways such terms may be of convenience to the buyer; and they are commonly more agreeable to the seller than D/A terms, because banks are more ready to buy D/P drafts, other things being equal; and it is in general important to the seller that banks be ready to discount his bills, because otherwise he will have to finance the transaction himself, and merchants who draw bills on foreign customers do not have large capital available for such a purpose. The buyer's advantage from a D/P draft at sixty days, for example, may be no more than that of having his raw material or his stock in trade ready at hand for him to buy when he wants it. He may be, for instance, a building contractor importing cement: it may be worth his while to pay the storage and the interest on the cement in order to have it at hand at any time within two months in case he needs it; frequently he cannot foresee how quickly his present contracts will move towards completion; the question of himself or his competitor obtaining new contracts may well turn upon the speed of building, and the availability of the raw materials is certain to be a factor in that. But there is a different case in which a D/P draft at time might be of advantage to our building contractor. If he is a man of repute in the locality and the draft has become the posses-

sion of a bank in his area which knows him, then despite the terms of the transaction the bank may, at its own risk, release the bill of lading to him against a trust receipt. The trust receipt, which the contractor will have to sign, makes the cement the legal property of the bank although it will have passed physically into the possession of the contractor. Thus the bank will have a specific claim upon an asset of the contractor in case he suddenly goes bankrupt. Furthermore, the bank may demand additional security before agreeing to release the goods under trust receipt.

Not all bills of exchange arise from international trade. Some are what are called finance bills, which have no documents attached because they do not cover the movement of goods. Sometimes finance bills are quite sound instruments drawn to settle some outstanding debt. But finance bills have not a very good reputation; for they have represented too often the raising of liquid funds by a firm which would find difficulty in raising money in any other way. This has been done at times by a firm drawing on one of its branches (a process known as 'pig on pork'!), hoping it will have money available to send to its branch by the time that the bill is due for payment.

At one time bills of exchange were common in the internal trade of England, but since the middle of the last century the cheque-deposit system has gradually displaced them. They are still, however, quite common in France, where the cheque-deposit system is not so highly developed. During the early days of the Industrial Revolution, indeed, banking facilities were not available to a sufficient extent in Lancashire and Yorkshire where the early development of industry occurred so rapidly. There, bills of exchange used to pass from hand to hand with great readiness, forming, in fact, the most important medium of exchange. In that time, therefore, they must be classified as money; but the ordinary bill of exchange of the present day, whether internal or international, must be looked upon rather as a short-dated security, that is, an investment soon to be repaid: a bill of exchange is not generally acceptable in payment, nor freely circulating among the public, so that we cannot call it money.

The bill of exchange, it has been said very well, forms a bridge of time and space: it enables payment to be made at such time that the buyer may have been able to resell at least a part of the goods covered by the draft, so putting himself in funds; and it enables payment to be made in his own country and in his own currency for goods bought from abroad. The seller too gets what he wants by discounting: payment at once in his own currency. And the banks get their interest.

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MONETARY INSTITUTIONS: PRELIMINARY SURVEY

Banks are of several sorts, Central Banks and commercial banks being the most important.

BANKS constitute a genus in which there are several species. Of these, Central Banks and commercial or Joint-Stock Banks are the chief. There are also savings banks and others, but for our purposes these are relatively unimportant. Commercial banks themselves consist of sub-species of which one, the London Clearing Banks, together with Central Banks, form the particular subject of our examination.

In other countries not only the names but also the real natures of the banking institutions are slightly different. Thus the Clearing Banks correspond imperfectly with the Member Banks in the United States, for example. Again, as a rule there is one Central Bank in each developed country and in some rather backward countries also. The Bank of England is our Central Bank, of course; and this appears to be quite different from the twelve Federal Reserve Banks in the United States. We shall find, however, that the differences are much more apparent than real; yet genuine differences do exist.¹ Just as commercial law is similar in Western countries, but not quite the same, so also with banks and other financial institutions. There would be reason for surprise if this were not so.

It is safer and perhaps better if the question of defining banks becomes an acute one, to define the different species and sub-species, and to do so catalogue-fashion. Thus we should define the Clearing Banks by saying that these are: the Midland Bank, Barclays Bank, etc. (leaving the whole list until later); similarly that the Central Banks are: the Bank of England, the Bank of France, the Bank of Italy, etc. (a rather wearisome and obvious sort of list). Having gone through all this process (if it became necessary) for each country in which we were interested, we could then eschew any general definition of banks, feeling sure that Prof. Harp and all the hosts of purism would be well satisfied on both counts.

Yet if Dr. Carp be asked by his small daughter what a bank is, we may feel sure that he, as one possessing omniscience in the family circle, will make suitable reply, quite probably beginning with the words, "to give you a rough idea what a bank is . . ."; for he would see some value in the rough idea, whereas Prof. Harp might find it shocking. It would be better, perhaps, to pry no further into the domestic pronouncements of our City spokesman; but to confess that we consider as acceptable his view that

¹ See Chapter XV.

there may be some value in the rough idea, at least to begin with. Accordingly, at the risk of misrepresenting to some extent the nature of one or more of the species, we may approximately describe the genus, bank, as a variety of firms for the safe-keeping of money and for the granting and transfer of credit.

Some good authorities prefer to stress the function of banks in accumulating the money of their customers and putting it to work while its owners are not using it;¹ but this idea is really included in our rough description. Banks have also been described as dealers in debts, their own and other people's.² This is a valuable idea also; and, if it is not so comprehensive as the form of words given above, it certainly lays the emphasis where it should be placed; that is, upon bank deposits, which as we have noticed³ are debts owed by the banks to their customers, and which are to-day the most important form of money, accounting for the great part of all transactions effected.

Banking grew by reason of desires for credit, for sound currency and for safety.

While the granting and transfer of credit are matters which will become plainer as we continue, we should be clear at once that the safe-keeping of money refers both to deposits, a score-keeper's function, and also to the safeguarding of tangible money. For banks grew during periods when robbery was a formidable anxiety to those whose wealth to a large extent took the form of precious metal. In modern times it is easy to forget that a town was once attractive to rich people on account of the greater security which it offered against violence; and that international trade was made hazardous, and sometimes too hazardous to be worth while, by successful pirates. Above all it was the precious metals which were dangerous to transport, and we find cities long ago building fleets to cope with the unnatural dangers of the sea, and introducing within their own communities drastic laws and institutions enshrining the principle of the sanctity of property. Yet banks as they developed also contributed to the solution of such problems, both in international and in domestic trade; for with their credit instruments they rendered unnecessary the transfer of coin.

The granting of credit began before the pages of history can be read clearly. It was the ancient pagan temples which began a practice which should not be regarded as only mercenary. Credit was given, for instance, in Babylon about the year 2000 B.C. for the purpose of providing a man with the necessities of life while his crops were growing, a farm credit upon which interest was charged. No doubt the system was abused, but clearly it enabled production to take place in circumstances wherein it would have been impossible to borrow from any other source. The

¹ See, e.g., Raymond P. Kent, *Money and Banking* (1947), pp. 87-8.

² See Geoffrey Crowther, *An Outline of Money* (1940), p. 81. A "credit institution" is treated similarly by A. G. Hart, *Money, Debt and Economic Activity* (1948), p. 21.

³ See Chapter II.

mystic associations of the lender must have enhanced the probability of repayment without legal compulsion, and the temporal resources of a particular divinity no doubt affected his prestige as a god.

Greek temples were often active in giving credit, which was really rather a sensible arrangement, for their priests appear to have been shrewd men, expert in judging character, which was very important at a time when repayment depended largely upon the personal integrity, and not upon attaching the possessions, of the borrower.

In early Roman times the same procedure existed; but it is at Rome that the lay banker emerges clearly in later times, perhaps as a corrective to abuses on the part of those who could claim divine justification. Lay bankers indeed had not been unknown in Babylon very much earlier, and some individuals pursued a banking profession in Greece. Moreover, we should observe that banking, like coinage, had independent origins in China and in India, and perhaps elsewhere; but the development seems to have been very much later in those two countries, and some of the evidence which we have on this matter seems to be contradictory or otherwise unsatisfactory.

Returning to the Mediterranean origins, we might notice that many ancient coins bore the image of a god. Perhaps this was no accident. Coining was usually a prerogative of sovereignty, but the men who were commissioned to strike the coins fashioned upon their surfaces what seemed appropriate; there seemed nothing incongruous in associating the deity with money. It appears reasonable to go very much further than this and say that the two were closely linked together in men's minds. The explanation that city states struck the image of their patron deity on their coins, as the Athenians impressed the head of Pallas Athene on many of theirs, so that it might serve as an identification, does not dispose of the suggestion which we have made; for the same city was accustomed to use several deities, not all of which were especial patrons.

In the Dark Ages banking practically ceased except at Byzantium. But the Middle Ages, as we should expect, saw the revival of banking; indeed, it might be more proper to say that banking began afresh. Its growth was very slow. Ecclesiastical institutions, as the safest available custodians, guarded monetary wealth, but did not in general carry banking functions much further than that. Not until the twelfth century did ecclesiastical banking begin to develop more fully, now at the hands of the Templars. At almost exactly the same time, in the year 1148, there was founded a large lay bank of importance, the Casa di San Giorgio in Genoa. This remarkable institution in return for a loan to the republic obtained the right of collecting certain taxes. In addition it performed all sorts of banking business, at the same time becoming practically a sovereign state in its own right. The Casa di San Giorgio lasted until the end of the eighteenth century, a life of six and a half centuries at present unsurpassed.

Private bankers flourished in the Italian cities during the Middle Ages, but their history seldom continued long to be one of success. As the

penetrating Contarini observed in Venice at the end of the sixteenth century, "The banker can satisfy his own desires for fine furniture and jewels by merely writing two lines in his books." Sooner or later most private bankers misused their credit to purchase perishable luxuries, thus incurring deadweight debt which dragged them down in the end into insolvency and ruin. Other bankers were ruined by the insolvency of their debtors.

So unsatisfactory was banking in the hands of private families that in important instances the state or the municipality stepped in to render financial facilities to the mercantile community on which its prosperity depended. Thus in Venice laws of 1584 and 1587 created the Banco della Piazza del Rialto, and a law of 1619 set up the Banco del Giro, these two public banks being amalgamated in 1637, sometimes being called by the latter name, but also known as the Bank of Venice. After a long history, not without times of difficulty, the Banco del Giro was brought to an end as a result of the political changes of 1806.

Before the marriage of the two parent institutions in Venice, the still more famous Bank of Amsterdam, or Wisselbank, had been founded in 1609. The purpose of the Wisselbank, as the name (Exchange Bank) implies, was not the creation of credit, the need for which had led to the banks in Venice, but the provision, for the purpose of transacting the large international trade of the city, of sound money in place of the many unreliable coinages more or less current. The Wisselbank stimulated trade greatly by accepting all currency brought to it, crediting the depositor in its own private money, bank guilders, after weighing and if necessary assaying the money received. After that the great trade of the city was done in paper tokens, for bank guilders had no coined existence. In almost every way the Bank of Amsterdam offers a contrast with the early goldsmith-bankers of England. It was set up as a municipal undertaking; they were private craftsmen turned bankers. Officially, the Bank did not make loans, and although it did so secretly these were not the main part of its business; loans were the chief profit-making activity of the goldsmith-bankers. The city of Amsterdam guaranteed the Wisselbank; the credit of many of the goldsmith-bankers was ruined, and, indeed, many of their depositors were ruined also, by the Stop of the Exchequer in 1672 when Charles II refused to the holders of Exchequer assignments the currency from incoming revenue by which they should have been repaid.

The Wisselbank was not, indeed, the model of wisdom and of scrupulousness which Adam Smith and other contemporaries supposed it to be;¹ and in 1791 it failed, although it lingered on in a moribund condition for nearly another generation until 1819. To find a contemporary bank of quite impeccable record we have to look at the Bank of Hamburg, founded in 1619. Like the Bank of Amsterdam the Giro Bank of Hamburg operated in its own private money of account, the mark banco. At the end of over two and a half centuries of successful banking, in 1875, the Bank of Ham-

¹ *Wealth of Nations*, bk. iv, ch. iii.

burg was absorbed, showing a surplus, by the new Central Bank of Germany, the Reichsbank.

Finally, in 1694, Britain set up a single preponderant bank, the Bank of England, resembling in some respects the foregoing pioneers, which was to set the pattern of central banking. We may notice that the Swedish Central Bank, the Sveriges Riksbank, founded in 1656, might claim to be older; but the claim would be somewhat debatable since it did not really act as a Central Bank until the Bank of England had long been pursuing such an activity.

Before proceeding to consider the Bank of England, perhaps we might suitably summarise the reasons for the foundations of the banks which we have mentioned by saying that three causes were at work in the process: the desire for credit, usually but not always productive credit; the need for a sound medium of exchange in preference to the poor coinages of those times; and the necessity for safeguarding the precious metals.

The Bank of England, founded to finance war with France, serves now as the Government's bank and as the bankers' bank, being responsible for the note-issue, for the gold reserve, and for exchange control.

When James II fled to France in 1688, he left some pretty problems and a lot of debts behind. The reputation of the monarchy in financial matters was low, and the royal credit was not improved by the opinion of many that William III was little better than an adventurer with the expensive habit of warfare. From a group of wealthy merchants of the City of London, however, the new King managed to borrow upwards of a million pounds wherewith to take part in the League of Augsburg, formed to fight Louis XIV of France. Interest was paid on the loan at 8 per cent per annum; but it was not the considerable rate of return on the King's borrowings which attracted the merchants so much as the exclusive right, which was permitted to them, of forming a joint-stock company with limited liability for the purpose of banking. The company was styled the Bank of England. This was not an inappropriate name, for the new bank was given the Government's account to keep and to manage; it also gave advice concerning the loan transactions of the Crown.

As well, William III borrowed from the public moneys which were never intended to be paid back. The old Stuart debts were added to the new loans to form the modest beginnings of the National Debt.

The Bank of England paid interest on its notes, which caused indignation on the part of the goldsmith-bankers, who complained that their deposits were attracted away. More formidable opposition arose from political causes: the Bank had been founded by supporters of King William, the Whigs; the opposition Tories therefore regarded the Bank with hostility, and when they obtained power sought to set up the Land Bank as a counterblast. But the Land Bank failed, and the Bank of England was left as the only large bank issuing notes; these remained its chief source of revenue.

It would be quite wrong to think that the Bank of England was set up as a Central Bank, with special functions not permitted to other banks: it was intended to be a large bank of the ordinary type. Associations of not more than six partners were still entitled to issue notes. The only business of the Bank which was unique was the management of the Government's account; indeed, governors of the Bank were still saying centuries afterwards that it was nothing more than an ordinary profit-making enterprise. Nevertheless the Bank of England developed into a Central Bank: it became the pattern on which the consciously created Central Banks of other countries were modelled. This was because the character of banking gradually changed from the time of its foundation, until the Bank was the only institution of just that type still surviving. It was partly the association with the Government, and partly the development of the cheque-deposit system by other banks, which left the Bank of England alone in the realm of note-issue, except for small or unreliable institutions which were gradually squeezed out of existence.

Every country of importance has a Central Bank now; but the financial strengths and the activities of the various Central Banks vary considerably from country to country. What does our Central Bank do? In the first place, the Bank is the only issuer of notes in England: no other bank is permitted to make an issue now. It acts, as it always has done, for the Government, holding the deposit balance, paying the interest on the National Debt, and managing the Government's borrowings and repayments. The Bank also holds the balances (which are always credit balances) of the Clearing Banks (the Midland, Barclays, Lloyds, etc.). As we shall see later on, it is important that these ordinary banks should have deposits with the Bank of England. Keeping the gold reserve of the country is another duty of the Bank: when it was possible to take notes to the Bank of England and obtain gold for them at a fixed rate, the guardianship of the reserve was much in evidence; but now gold can be had in this way no longer. Indeed, the gold reserve held by the Bank of England has become since World War II a poor little historical relic of under half a million pounds sterling; but it may be the case (or it may not be) that a substantial gold reserve will play an important part in our future monetary system, being held as in the past by the Bank of England. Finally, as a result of our prolonged economic efforts during World War II, the ability of Great Britain to pay for vital imports having become precarious for the moment, it is necessary somewhat stringently to control foreign exchange dealing; a duty which in one way or another has really been discharged by the Bank for centuries. In the past it was enough to lay a gently restraining or corrective hand upon foreign exchange markets in which people were free to do what they liked; but in the adverse conditions of to-day exchange control means that the Bank has to decide, under Government regulations, whose transactions merit the receipt of dollars or other foreign currencies in exchange for sterling, and whose do not. This task is onerous to the Bank and little short of infuriating to British subjects; none the less it is

vital to our recovery, in a manner which we shall have to investigate;¹ and this form of control is quite inevitable.

This example of the execution of the Government's policy by the Bank is symptomatic: in all important matters the Bank and the Treasury work hand in hand. The Government rightly considers itself ultimately responsible for all major decisions of monetary policy; but in formulating its policy it has available the advice, based upon great experience, of the Bank, which also takes the practical steps putting into operation the policy. We may remark that the nationalisation of the Bank in 1946 brought about no significant change: if in future the Bank of England is levered into the scales of party politics (which is not likely), that would be a serious matter for regret.

Joint-Stock Banks of deposit, having superseded private banks of issue during the nineteenth century, now provide the bulk of the public's money, and furnish working capital to the business community.

Throughout the eighteenth century the Bank of England was the only joint-stock banking corporation in the country. Because no others were permitted by law, there arose a great number of small banks: anyone could set up as a bank and issue notes, for there were no restrictions regarding the minimum amount of capital which a bank ought to possess, or anything like that; in fact a large number of these petty banks were started by tradesmen who were not people of large means.

Nevertheless during the eighteenth century the private banks of issue were not grossly unsuccessful: there was an insistent demand for notes to use instead of coin, and for notes to borrow in order to finance the raising of agricultural produce and the early industrial output. But the bankers in general were inclined to lend too much: then cattle disease would break out, or the price of wheat would fall, and the farmers would be unable to repay the loans which a local banker had made to them; people in the neighbourhood would know that some farmers were in a bad way, and they would begin to wonder whether these would ever be able to pay back the banker; if not, the banker would lose heavily. The next stage was to wonder whether the banker would lose so much that he would not be able to give coin for his notes: someone would decide to be on the safe side, and would take the banker's notes to him for encashment in coin. Then the mistrustful man would tell his friends what he had done, and the friends would think it wise to do the same; soon every note-holder would be arriving at the bank asking for coin, a process known as a 'run' on the bank. Now, of course, the banker did not possess enough coin to encash all his notes, so that, if the run went on long enough, he would be forced to close his doors. He *might* be able to pledge his possessions with another banker in exchange for sums of coin, and thus be able to open next day, continuing to cash his notes until people felt reassured that he was really quite sound and thus that his notes were safe. But very often it was impos-

¹ See Chapter XIX.

sible to borrow large amounts of coin in an emergency, and the banker's doors remained shut. Then his possessions would have to be sold to find cash for his notes; and often enough the proceeds were not sufficient to pay the notes in full. Sometimes this would happen because the banker had really lent unwisely and lost more than the amount of his capital; but sometimes it would happen because the prices realised at the sale of his assets were less than they really ought to have been, since goods sold in a hurry never realise their full value.

Now when a bank had failed in the manner described, it was only natural that people in the locality should begin to wonder whether other banks in that area were sound. A certain number of notes would almost certainly be taken to other banks for encashment; and a panic-stricken run on them was quite likely. It happened quite frequently that the fact of one bank really being in difficulties would cause runs on all the banks in a town, and the sound ones would be brought down with the bad one, simply because assets could not be realised in an emergency at their full value.

Small banks are inherently more hazardous undertakings than large banks, because a small bank cannot, and a large bank can, spread its risks. A bank must lend to those people whose means and ability seem to justify the granting of credit. In the nature of the case, the sole partner or the two or three who carried on a small banking business would have adequate knowledge regarding only the people of their town or district: they had to lend largely in one place in order to be sure of the people to whom they were lending. On the other hand a big bank, lending all over the country, might sustain serious losses in one place, but be able to rush coin from branches where it was doing well, and where, therefore, its notes were not suspect, to the place where a run was developing. In such a way even serious losses might be prevented from bringing about the liquidation of the bank.

During the Napoleonic Wars bankers and others began to regard the high prices which prevailed for so many years as quite normal. Farmers who received high prices for their wheat and other products were rich men. Then the Wars came to an end: prices fell a long way; farmers in particular became rapidly poor and could not repay their loans. This happened not only in one district, of course, but generally throughout the country: the whole structure of credit became unsound. But in the first years of peace, a great many new companies were founded, and these did a large amount of spending of capital moneys, so that a great new boom developed, like the boom immediately after World War I; and the little banks lent far too much. But the pace was too swift, and in 1825 there was a terrible crisis, with runs of varying magnitudes on practically every bank in the country.

The passing of the crisis left widespread ruin. Men realised that small banks were dangerous; and that small notes, which were accepted in circulation so easily by those without sufficient discretion to judge of the

soundness of the issuing bank, were particularly likely to be issued to excess.

But Parliament did not like to infringe the monopoly of the Bank of England too far; for the Bank had accommodated the Government for more than a century, and had recently weathered a financial storm of unparalleled violence during the Wars and afterwards. So a law was passed in 1826 permitting Joint-Stock Banks of more than six partners to be set up, but not within sixty-five miles of the centre of London, the metropolis being considered to be the special preserve of the Bank of England. Notes for amounts of less than £5 were prohibited at the same time.

Now in 1833 the charter giving the Bank of England its position of monopoly was due for renewal; and much discussion went on from the crisis of 1825 to that date regarding the banking system in general and the Bank of England in particular. In consequence, changes were made. The only one which concerns us at the moment provided that Joint-Stock Banks should be permitted to exist in the London area, but without the right of note-issue.

The prohibition of note-issue to London Joint-Stock Banks was not the revolutionary change which it might appear to be, for the cheque-deposit system was just beginning to make rapid headway, and probably would have superseded the note-issue system without the coercive stimulus of the Act.

In 1844, after another crisis, there were a lot more changes, among which was a regulation that no new banks were to be allowed to issue notes at all, and that those which were then issuing notes were not to issue more in future than the average amount in circulation during the first three months of 1844. The legislators were whipping a dying horse.

But the new Joint-Stock Banks, specialising in deposits, did not become the largest unit in the monetary system either easily or within a short time; for they had to overcome the opposition and hostility of the Bank of England and of the old-established private banks, of which the London ones were particularly antagonistic. The principal complaint against the new establishments was that they allowed interest on deposits—the identical complaint which had been made regarding the Bank of England itself nearly a century and a half before!

The present practice regarding interest rates on deposits is as follows: on demand-deposits no interest is paid; on time-deposits the Joint-Stock Banks used to pay different rates in London from those granted in the provinces; the London time-deposit rate used to be 2 per cent below Bank Rate, which is the rate at which the Bank of England is prepared to make certain loans to the Money Market; but now Bank Rate itself is only 2 per cent, so the Joint-Stock Banks have reduced the margin to $1\frac{1}{2}$ per cent, thus paying $\frac{1}{2}$ per cent on London time balances. Country time-deposits used to earn $2\frac{1}{2}$ per cent, whatever Bank Rate might be, but now the banks give $\frac{1}{2}$ per cent on these also. Bank Rate has been at 2 per cent since 26 October 1939; indeed, except for a momentary upward flutter in the early

months of World War II, since 30 June 1932. If eventually it goes up higher, the banks may revert to their old practice of giving 2 per cent less than Bank Rate for London time-deposits, and perhaps as much as $2\frac{1}{2}$ per cent again for country ones (though such a rate as that has come to look very high by comparison with the recent past). But such a system may be something as dead as the sovereign or the brontosaurus. This is not easy to tell during the present transition period while the form of the future is inchoate in the womb of time. Yet there are indications which we shall observe that a frequently fluctuating Bank Rate, or a Bank Rate steady around 5 per cent, is no more than a memory of the past. If so, bankers' interest rates on time-deposits have already become something fixed by convention, and thus perhaps arbitrary and artificial also.

When we think of the career of a cheque—drawn, handed to the payee, paid into the payee's bank, its amount transferred from the payer's bank to the payee's bank, cancelled by the payer's bank and handed back to the drawer—it seems a very elaborate business; but this is a system which both drawer and payee find convenient. Such a method could not be used very widely, however, until a certain stage of elementary education had been reached by the mass of the people, since making out a cheque entails the art of writing. Furthermore, economic development had to reach a certain stage before the detection of forgery became everywhere sufficiently sure and speedy for safety.

Besides managing the cheque-deposit system by means of which by far the greater part of all goods and services are paid for, and besides performing for their customers numerous minor services, the Joint-Stock Banks grant credit. Why? What is the credit used for? The most important case is that of productive credit. A manufacturing firm, for example, has the opportunity of accepting a profitable order; to fulfil that order it will require additional raw materials, fuel, etc.; to buy these it may not have the ready money (bank deposits) available, having planned its bank balance to meet ordinary expenses not including those necessary for the new order. Thus it needs additional money to cover the purchases required, and possibly also to cover higher wage payments either for overtime or for additional workers or for both. So the firm arranges with its bank to pledge certain securities belonging to its reserve fund in return for a loan or an overdraft; and then the firm proceeds to use the credit to fulfil the new order, counting the interest on the loan as part of the cost of production. When the goods have been manufactured, delivered and paid for, the manufacturer can pay off the loan or overdraft and thus secure the return of the securities pledged.

This is the typical short-term credit operation where the borrower is a manufacturer. If the borrower is a retailer (or other sort of merchant), the purpose of the loan will usually be to enable him to carry a greater stock. If the greater stock becomes permanent it will be only from his profits, presumably enhanced by his greater scale of operations, that repayment will be possible.

It may be that a concern will borrow with a view to extending its productive real capital: the manufacturer to set up a new factory or to buy new machinery; the merchant to extend his warehouse or his shop. These would be considered additions to permanent capital and not to working capital. Banks do not care so well to make loans for these purposes. The securities offered as collateral may be excellent, Government bonds perhaps, and their value may be and may be likely to remain far in excess of the amount of the loan sought. Yet in the nature of the case the borrowers would be able to repay only out of profits; only over a long time if the plant extensions are large; and only if their expectations of higher profits prove correct. If hopes are falsified the bank is still covered by the collateral, but it will not want to recoup itself by selling this. On the contrary, the bank manager will want to support and to accommodate his customer. If he does that, then the bank loses its freedom of manœuvre so far as the amount of that loan is concerned. Now that is just what banks seek to avoid: their profits depend upon an ability easily to change their assets, and, more important, it is the essence of good banking that the assets should not become frozen. Thus Joint-Stock Banks prefer commercial credits and seek to avoid loans for permanent real capital increase.

The case of the retailer who borrows to increase his stock, and then finds that he wants to carry a larger stock permanently, is rather different. If the bank presses for repayment, he can always let his stock run down and thus accumulate money wherewith to repay. The manufacturer with his new machines cannot do that. Only when the machines have earned their replacement costs in his depreciation fund will they be assets in the form of money again; and that may take years.

Joint-Stock Banks also grant consumption loans, that is, borrowings by those who want money to spend as income. Except in rare cases people who want a personal loan or overdraft of this sort will certainly have to provide collateral. They may be anticipating quite sensibly income which they will in fact make; on the other hand, it may prove that they never make the income or effect the savings which they had hoped to do; and thus that the credit obtained from the bank has to be repaid by the sale of their pledged securities. Consumption loans are, however, unimportant compared with productive loans.

It happened that in 1948 long term rates of interest (as indicated by the yield on Consols) were moving not far under the historical average of normal times, namely $3\frac{1}{4}$ per cent. Usually long term rates have been higher than this in war and immediately post-war periods. During World War II, however, they were not; and afterwards, as one result of a somewhat odd financial policy, long term rates were depressed below the present level. This figure of $3\frac{1}{4}$ per cent was also the one about which long term rates were moving fractionally in the years between the great depression and World War II. Before that, long term rates were liable to reach 5 per cent or 6 per cent. Now, and ever since the great depression, short term rates have been very low. Thus many firms feel now, as they felt before

World War II, that it is not worth while to pledge with a bank their reserve securities, on which they will be earning only about $3\frac{1}{4}$ per cent, with little chance of an increase in Stock Exchange value, in order to obtain a loan or overdraft for which they will be charged probably 4 per cent or $4\frac{1}{2}$ per cent. Thus it has become more common than it used to be for companies to finance themselves by selling their securities on the Stock Exchange and getting in that way the money which they need for the smooth operation of their businesses. This process is particularly noticeable when we look at the balance sheet of one of the Joint-Stock Banks and observe that the proportion of advances to customers is very much less than it used to be. Yet the provision of working capital to business firms is still a Joint-Stock Bank function having first-class importance.

Some of the Joint-Stock Banks operate the Clearing House, making settlement of balances between them by cheques on the Bank of England.

In the early days, before the Joint-Stock Banks existed, the private bankers had begun to turn to deposits because the public preferred the Bank of England's notes to theirs. Their customers paid in cheques drawn on other banks, so that messengers had to be sent round to these to collect the money transferable. As the cheque-deposit system grew, this procedure became too cumbersome, wherefore the messengers gradually formed the habit of meeting at a chosen place in order to cancel off the cheques due from bank A to bank B with those due from B to A, and likewise those between A and C, B and C, A and D, etc. This offsetting process later received official recognition, and a special place was hired for the purpose. This is what is called the Clearing House. The upstart Joint-Stock Banks were not admitted to the Clearing House at first; but as they grew important, it became irksome to settle with them directly, and they threatened to set up a Clearing House of their own. In 1854, therefore, some of the Joint-Stock Banks were admitted.

Even with the clearing procedure there were, of course, balances to be settled by the transfer of money, since the amounts due from bank A to bank B would not exactly offset the amounts due from B to A. Such balances were settled by the transfer of Bank of England notes. But in 1854 the Clearing Banks all agreed to keep accounts with the Bank of England—the Joint-Stock Banks had not been allowed to have them before this date—and balances were thereafter settled by cheque-deposit transfers between the Bank of England accounts of the Clearing Banks. The system was rounded off by the Bank of England becoming a member of the clearing in 1864. Banks not included in the clearing have to make settlement by drawing cheques on a bank which is a member.

Since the beginning of 1936 there have been eleven Clearing Banks, not counting the Bank of England whose position is, of course, a special one. The eleven with their total assets as at 31 December 1948 are as follows:

	£000,000
1. The Midland Bank Ltd. ...	1,444
2. Barclays Bank Ltd. ...	1,351
3. Lloyds Bank Ltd. ...	1,210
4. The Westminster Bank Ltd. ...	896
5. The National Provincial Bank Ltd.	816
6. Martins Bank Ltd. ...	321
7. The District Bank Ltd. ...	239
8. Williams Deacon's Bank Ltd. ...	127
9. Glyn Mills & Co. ...	84
10. The National Bank Ltd. ...	76
11. Coutts & Co. ...	56

The first five of these are known as the Big Five, of course, and sometimes the first seven are described as the Big Seven. The Big Five all have head offices in London; but the head office of Martins Bank is in Liverpool, although the name comes from the very ancient London branch. The District Bank has its head office in Manchester, and, like Martins Bank, its business lies chiefly but not entirely in the north country. Williams Deacon's, with its head office also in Manchester, and Glyn Mills & Co., whose head office is in London, are part of an association of three banks, the third being the Royal Bank of Scotland, which is not a member of the London clearing. The National Bank has its head office in London, its more important English branches in the west coast ports, and branches throughout Ireland. Coutts & Co. is affiliated with the National Provincial.

Besides the London clearing there are provincial clearings in twelve chief English towns, and also a provincial clearing in Dublin. The latter is much the largest, its figures of cheques, etc., cleared amounting recently to about as much as the two largest English provincials (Liverpool and Manchester) combined. The London clearing comes to about half as much again as all the rest put together.

The Money Market comprises: the Bank of England; the Clearing Banks, the Non-Clearing Banks, the Acceptance Houses, the Discount Houses, the Bill Brokers, the Finance Companies, etc.

What are the institutions which make up what is called rather vaguely the Money Market?

First there is the Bank of England, the Central Bank, of which we have said something already.

Second there are the Clearing Banks, concerned chiefly with the management of the cheque-deposit system; with making advances to their customers; and with undertaking investments on their own behalf.

Third come the Non-Clearing Banks, similar in a broad sense to the Clearing Banks, but not so large nor so important. The Non-Clearing Banks perform a lot of business of a specialised nature: some of them being concerned with finance in particular parts of the world with which a

brisk business goes on in normal times; some of them being branches or agents of large banks in foreign countries; and some specialising particularly in longer foreign loans and (in normal times of free dealing) in exchanging the money of any one country for that of any other.

Fourth there are the Acceptance Houses. These make a speciality of buying bills of exchange at a discount, and either rediscounting them or (apparently more rarely) holding them until they are due for payment. The scale and even the precise nature of the operations of this group of firms remains somewhat obscure to the outside observer. Acceptance Houses have a wide knowledge of the firms on which bills are customarily drawn and an extensive understanding of the conditions in which suppliers of goods draw such bills. This expertise guards against the acceptance of unsound bills. In times past the foreign bill has been important: many merchants abroad are not well known to those who supply them with goods both from this country and from others; this being so, the suppliers are not willing to take the risk of drawing bills on them for the goods being sold; so the buyers arrange that a well-known London Acceptance House shall accept the bills for them. A knowledge of the soundness of the ultimate buyers is evidently essential for the Acceptance House. A similar process used to occur in the import trade also. Acceptance Houses really lend their financial prestige to enable the buyers without trouble to obtain the goods which they want: for this service the Acceptance Houses earn discounts or commissions pure and simple.

Fifth, and very closely related, are the Discount Houses. There are now twelve of these, and extensive information about their business has recently come to light.¹ The earning assets of the Discount Houses consist of three principal elements: commercial bills, Treasury bills and short-dated Government bonds. The bills of both sorts are bought at a discount, and sometimes re-discounted with banks of all sorts, a 'turn' (i.e. a small fractional profit to the Discount Houses) being normal between the discount rate and the re-discount rate. The Government bonds earn interest, but although they are mostly very short-dated they are not, of course, as liquid as bills. The total portfolio, as it is called, of bills and bonds was estimated in 1948 to exceed £845 million.² This represents a great increase on the pre-war estimate of something under £250 million. Apart from capital, reserves and re-discounts, the liabilities of the Discount Houses consists of deposits and loans at call or short notice. The deposits are few in number and large in amount compared with those of the Clearing Banks: even on demand deposits the Discount Houses pay interest, which is the reason for certain large home and foreign enterprises depositing with the Discount Houses rather than with the banks. The loans are obtained from the banks: it is evidently a business of high skill and sure judgement to buy bills and bonds with loans soon due for repayment and perhaps not renewable, or even with call money of which the banks may require repayment at any moment. *The Economist* has described the function of the

¹ See *The Economist*, 24 July 1948, pp. 154-5.

² *ibid.*

Discount Houses in the short bond market as that of a shock-absorber:¹ it is evident that, with the ample 'cushion' of the Discount Houses' resources coming in between, variations in the supply of and the demand for short bonds will cause smaller changes in their selling prices.

Sixth there are four 'running brokers.' It is their business to collect bills from the market or from outside merchants, and to sell each bill at the best price available. Their knowledge of the market enables them to discern where the best price will be given for any particular bill. Running brokers are agents rather than principals, and do not keep a large stock, or portfolio, of bills themselves.

Lastly, there are finance companies lending money for longer periods than others are willing to do. Their customers were in many cases foreign and included governments and other authorities whose revenues were not associated with profit-making enterprise.

In the various sections of the London Money Market, there is a certain amount of overlap, banks for example being prominent in the acceptance market.

There are indeed several other institutions which might be recorded as belonging to the Money Market, including the Insurance Companies, Building Societies and even the Stock Exchange. But, except in relation to the last of these of which we must say something in a moment, perhaps enough description has been given to indicate for general purposes the nature of the institutions and the character of the transactions which are found in what is so loosely called the Money Market. (It is not usual to include the Stock Exchange under this heading in England, though it is almost impossible not to do so in the United States and elsewhere.)

We should notice before passing on that the bill of exchange market in London, giving rise to several sorts of specialised dealers, never recovered after World War I the great volume of financial dealing which it had achieved before. The result was that various other institutions besides the Discount Houses turned over from bills of exchange to the holding of Treasury Bills, the three months borrowings of the British Government. From about 1932 the rates of discount to be earned on Treasury Bills were so low that dealers hardly covered their expenses, if they did so at all, considering that the money with which the Treasury Bills were purchased was borrowed from the Clearing Banks at almost the same rate of interest. Members of the Market earned their profits largely by dealing in Government bonds nearing repayment date.²

In World War II bills of exchange almost vanished altogether. As we should expect the foreign bills declined more than the inland bills. Since the return of peace both foreign and inland bills have recovered rapidly, the latter consisting in considerable measure as they have done ever since World War I of hire-purchase bills;³ but, despite this and despite the increased volume of international trade which we look for in future, it

¹ loc. cit. ² See *The Economist*, 31 January 1948, p. 201.

³ *ibid.*, 10 April 1948, p. 603.

seems certain that both sorts of bills of exchange together will be unable to provide employment for any large proportion of the funds disposed of by the Discount Houses and the Bill Brokers who grew great in the past by handling these transactions.

The Stock Exchange is a second-hand market for different types of securities: through the services of professionals, investment, borrowing and speculation are facilitated.

We have already mentioned the Stock Exchange in one or two connections and it is necessary now to give an explanation regarding its nature. If some of the matters touched upon are elementary, it may be claimed that there are those by whom such simple facts are not understood.

'The' Stock Exchange means the London Stock Exchange, in Throgmorton Street in the City. The provincial ones are comparatively unimportant markets having together a much smaller volume of dealing than 'the' Stock Exchange. The dealing in these markets is, of course, in stocks and shares, and great is the variety of securities traded, including at one extreme Government bonds which are quite certain to be repaid at due date and at the other extreme the ordinary shares of firms bordering upon bankruptcy. We should not expect to find the shares of fraudulent concerns, of the Wild Cat Trading and Finance Company and its fellows, on sale on the Stock Exchange, for the authorities subject companies to some scrutiny before their shares are accepted for dealing; yet on occasions in the past there have been quite worthless securities, some belonging to dishonest, some to fantastically optimistic concerns, among the great mass of bona fide stocks and shares dealt in.

The existence of this great marketing enterprise is of great convenience to the public. We can not only sell our securities if we find suddenly that we want the money, but also we can invest our savings without having to look for someone who wants to borrow them. Furthermore, we can change, from time to time, among securities of different degrees of riskiness, and spread our money over a wide range of different investments so that our fortunes will not be linked with only one enterprise.

Securities dealt in on the Stock Exchange are of different sorts: there are ordinary shares which earn a dividend; the dividend being the residual profit of a firm, after all its expenses and prior claims have been paid, which is split up among the various shareholders usually once or twice a year in proportion to the amount of shares which they hold. Then there are preference shares which pay a fixed rate of interest to the holders; the interest on preference shares is one of the prior claims which a firm must discharge before it gives out anything to the ordinary shareholders. It is the ordinary shareholders who may make the big incomes (or who may make nothing at all), but the preference shareholders are more certain of getting their fixed rate. A special type of preference share is called a cumulative preference share; if a firm fails to pay the full rate on such shares in any year, the difference must be carried forward as a prior claim

on the profits of subsequent years, and the ordinary shareholders do not receive anything until the accumulated arrears of preference interest are paid off. Finally, there are debentures, which are loans rather than shares; if preference shareholders get no return on their investment, they have to grin and bear it; they have wrapped up their fortunes with the firm in question, and if the firm does not make enough profit to pay a preference dividend, they are the losers. But if a firm fails to meet its debenture interest, the debenture holders can put the firm into liquidation, have its assets sold and recoup themselves from the proceeds. They may decide in any particular case of default not to take such a drastic step, but they are entitled to do so if they do not receive their fixed rate of interest.

Shares are always numbered, which makes it easier to prevent people from being swindled with forged shares. In dealing, it is always necessary to buy or sell a whole share; fractions of a share are not permissible. Shares may be for almost any amount; one-shilling shares are known; two-shilling shares are quite common among rubber-producing companies; five-shilling and ten-shilling units are fairly well represented; but the big thing is the £1 share: perhaps two-thirds of all the shares in the London market are of this denomination. Then there are the larger units, of which £5 is probably the most usual. When a company starts and issues shares, it may not require the shareholders to pay the full amount of the share all at once. It may issue shares of £1, 'ten shillings paid'; that means that it can require the investors to pay the other ten shillings per share at any time. Nearly all the Clearing Banks have partly paid shares, £5, £1 paid, being common to several; they are unlikely ever to call for the rest.

Stocks are almost exactly the same as shares, but the former must be paid-up in full; they do not require a particular number, and any odd fraction of them can be bought or sold. They are divided into different classes like shares. There is also a further type of stocks and shares, called deferred stocks and shares, which are not numerous; as the name suggests, they rank for payment of dividend after the ordinary shares.

The purpose in having different types of shares is to suit both investors and borrowers: different investors do not all wish to take the same risks and the variety of securities enables them to choose what they want, which will in many cases be a mixture of the different types. If a company, which is doing well, wants to extend its business it may decide to raise fresh capital; the shareholders, who are the owners of the firm, probably will not want to share the big profits which they expect with new ordinary shareholders, so it is decided to issue debentures. In this and other ways the variation in the ranking of stocks and shares serves the purpose of the borrowers.

The people who deal on the Stock Exchange fall into two groups, which are quite separate. Brokers are the people who buy and sell for the public; they are agents who act on commission; what they sell must be bought in the market; it does not come from among such securities as they may themselves possess; and the shares which the public sells are sold by them in the market, not bought by themselves.

The others are called jobbers: their business is to hold blocks of all sorts of stocks and shares, and to be prepared to buy or sell on their own account whatever the brokers want to deal in on behalf of the public. Jobbers do not have any dealings with the public directly, but only through the brokers. A firm of jobbers does not try to deal in every security in the Exchange, because there are so many, but specialises in rubber shares or gold-mining shares or something else, and the brokers, of course, know the right firms of jobbers to go to in order to deal in any particular shares.

Thus a Stock Exchange is essentially a second-hand share market: it deals in old stocks and shares; these are to be preferred to new ones because investors, otherwise ill-informed, will be able to form a judgement of their worth from the prices quoted for them. A Stock Exchange comes near to being the 'perfect market' of economic theory. In 1948 the London Stock Exchange had 4,099 members. Each of the members may employ an authorised clerk to assist him in dealing. The members belong to a great number of separate firms, so that dealing is highly competitive. In addition, there are outside brokers, who are not members, but these are of less repute because some of their number have resorted occasionally to dishonest practices. The uniformity, durability and limited supply of the individual stocks and shares dealt in are other factors making for perfect market conditions.

Apart from a board, charged with the management of the buildings in Throgmorton Street, the Stock Exchange is governed by a committee, whose rules and decisions are binding upon members. Both the board of managers and the committee are elected by and from the members.

Except for those relating to Empire governmental stocks, bargains on the Stock Exchange are not paid for, nor the scrip delivered, at once. There is a special settlement, or account, day, which usually falls once a fortnight, generally on a Thursday; but the account stretches over three weeks when a public holiday comes within the period; thus there are twenty-four accounts during the year.

Many people speculate on the Stock Exchange, some regularly, some occasionally. The system of fortnightly settlements facilitates speculation since a sale early in the account can be offset by a purchase later: in that case, the speculator never actually receives (or delivers) the shares, and does not have to pay (or receive payment) for them; he either pays or receives merely the difference between the purchase price and the sale price. A man who contracts to buy shares, hoping they will go up, and not meaning to hold them but to offset their cost with a later sale, is known as a bull. His opposite, who sells shares (which he often does not possess), hoping that he will be able to buy them back more cheaply, is called a bear. Another animal is the stag, who applies for new issues, especially high-class ones, hoping that they will go to a premium before the issue is finished; he does not mean to hold the shares, although he may have to pay the first instalment of the issue price before he sells at a profit.

But it is possible, and indeed quite usual, to speculate for a period longer

than the account: in such cases, the bargain must be carried over to the next account. If a bull finds that the shares which he has contracted to buy have failed to rise, he may 'contango' them: this means that the bull's broker must virtually borrow money from a jobber (usually the one with whom the bargain was made); the borrowing rate includes a rate of interest per annum and the difference between the buying price and the price on contango day; the latter, which is called making-up price, is fixed by the Clerk of the House (a Stock Exchange official), not by an individual jobber; contango day is the Monday before the Thursday settlement day (or the Friday before a Wednesday settlement); the first four days of the first week of an ordinary fortnightly account are collectively known as the settlement (of the last account); they are simultaneously the first four days of the new account. When a bull's broker virtually borrows money from a jobber, he makes a double bargain, a sale of the shares for the old account at making-up price, and, offsetting this, a purchase at the same price for the new account.

If a bear wishes to carry over a transaction, because the shares have gone up, and not down as he expected, his broker arranges to borrow from the jobber, not money, but the shares: the broker buys them for the old account and sells them for the new one. The difference in price which the bear pays is called backwardation.

We should observe, before leaving this subject, that successful speculation on the Stock Exchange, like most speculation, consists in buying what the public and the market are buying, and selling what they are selling. For success, it is not always enough to behave wisely, buying stocks and shares which really do stand low compared with a reasonable capitalisation of their prospective yield, and selling those which stand too high. Indeed, speculation on sound, realistic lines may yield losses. It pays to be with, or rather before, the market: if the market is chasing worthless shares up to a great price, the successful speculator will be among the early buyers—and among the early sellers. On the whole, it is very unusual for shares to stand at prices either absurdly high or absurdly low. In a Stock Exchange boom, all ordinary shares stand somewhat too high, and in a slump they occasionally fall excessively low.

The New York Stock Exchange has been notably more volatile than the London one. The absurdly high prices sometimes prevailing in the former did not reflect the actions of the professional dealers, of course, but those of the public. If a conviction of optimism spreads and increases among a hundred and fifty million people, such numbers may bull the market as to render prices fantastic. So it was in 1928 and 1929; after the boom burst, the prices of securities collapsed to levels much lower than those of similar securities in England. The tendency to wild speculation on Wall Street has been curbed very largely, however, perhaps completely, by sober and thoughtful legislation passed during the Great Depression. It is unlikely that gambling like that of the later 'twenties will ever be seen again.

BOOKS

As to banks:

J. L. Laughlin, *Money, Credit and Prices* (1931), vol. II, ch. ii.

A. Andreadès, *History of the Bank of England* (1935), pt. II, ch. i and iii.

Walter Leaf, *Banking* (1935), ch. ii.

Walter Bagehot, *Lombard Street* (1915), ch. iii.

Charles F. Dunbar, *The Theory and History of Banking* (1917), ch. viii.

R. H. Mottram, *Miniature Banking Histories* (1930), ch. i to vi.

Geoffrey Crowther, *An Outline of Money* (1940), ch. ii.

James W. Gilbert, *The Principles and Practice of Banking* (1871). (The whole of this great classical work is more or less relevant: more particularly germane is the first division of it, entitled *The History and Principles of Banking*; Part I—"Of Practical Banking" is not now so important, with the exception of sect. ix. Part II—"Of Banking Institutions" is of particular interest in sect. i to iv. It should be remembered that even the new edition of this work, to which the above references apply, is dated 1871.)

Regarding the Money Market and the Stock Exchange:

Walter Leaf, *Banking* (1935), ch. iii.

Hartley Withers, *The Meaning of Money* (1932), ch. viii and ix.

Myra Curtis and Hugh Townsend, *Modern Money* (1937), ch. vii.

R. S. Sayers, *Modern Banking* (1947), ch. iii.

Note: *The Economist* is of inestimable value to an understanding of monetary institutions and of the changes in them.

CHAPTER VII

THE VALUE OF MONEY: INDEX NUMBERS

The value of money means its purchasing power; it is thus the reciprocal of all prices.

In economics the value of a thing means strictly speaking its power to command other things in exchange, the 'thing' and the other 'things' being economic goods, of course. Yet not even Prof. Harp in all his academic rectitude will infallibly use the word value in this sense; sometimes he will say, and even write, "value" when he means price. And Dr. Carp will say quite openly, "the value of those shares to-day? Oh, about six and eightpence." He would be aggrieved if criticised.

The fact of the matter is that 'value' is used in two senses: sometimes it means real value, the other things which an economic good has power to command in exchange; and sometimes it means nominal or monetary value which is the same thing as price. (And to the philosophers the word means something quite else, of course.)

We are concerned here with the nominal or monetary value of things and with the real value of money. Thus, the value of a thing means to us the amount of money which it is worth: the value of everything is expressed in money. Conversely, the real value of money is expressed in everything. The cost of a packet of cigarettes let us say hopefully is 2s.; if it goes up to 3s., then the value of money is only two-thirds as great as before in terms of cigarettes. Let us imagine the price of everything to go up by 50 per cent: that is the same thing as saying that prices are multiplied by $\frac{3}{2}$; then the value of money is multiplied by two-thirds. These fractions are, of course, reciprocals, and we actually speak of the value of money as being the reciprocal of prices. The value of money means its purchasing power: when prices go up, it purchases less; when prices go down, it purchases more. Thus we speak of the value of money as moving inversely with the level of prices.

Index numbers measure the changes in price-levels; but the items included in the index have different importances; therefore the index is weighted according to the expenditures on the items.

We have to think of the price of everything when we speak of the value of money, unless we are considering the purchasing power of money in a particular market, the cotton market, for instance. Suppose there are three sorts of cotton, A, B and C, at 2s., 3s. and 4s. respectively; now we will call the value of money (in terms of cotton) 100 while these prices

prevail. Then let us consider another period of time when the prices have altered as follows: A 2s. 6d., B 2s. 9d., C 6s.; they have not all moved in the same direction, but taken together they have advanced by one-quarter, or 25 per cent; in the second period of time the value of money has therefore

gone down to $\frac{100}{125} \times 100$, which equals 80 compared with the original purchasing power of 100. That is the point: the comparison. We do not become any wiser by saying "we will call the value of money 100 while these prices prevail," but if we work out its value in the same way when the prices have changed, then we do get another figure to compare with the 100, and the *relative* size of those figures means a lot. We could have called the original value 10 or 1, and worked out the second one as 8 or .8; absolute size means nothing; we do it only for the sake of comparison.

How did we work out that the prices of the three sorts of cotton together had gone up by 25 per cent, or, as we may express it, that the price-level of cotton had gone up from 100 to 125? Simply by adding up the two sets of prices and expressing the excess of the second over the first as a percentage of the first. But adding up prices like this assumes tacitly that the sorts of cotton are equally important. Perhaps they are not. Suppose now that the average daily dealings are:

- A 1,000 pounds;
- B 2,000 pounds;
- C 200 pounds.

Then we have an average daily expenditure of:

A	1,000 pounds at 2s. per pound	£100
B	2,000 pounds at 3s. per pound	£300
C	200 pounds at 4s. per pound	£40
	Total	<u>£440</u>

What is our criterion of importance? It is *not* the physical quantities of the various grades of cotton: we cannot say that the importances are in the ratio 1,000 : 2,000 : 200, or, as we should write it for mathematical simplicity, 5 : 10 : 1. That would be true only if the three grades were quoted always at the same price. And we have chosen an example wherein all our quantities are expressed in pounds; if we had chosen different sorts of things, bread and beer, and considered the value of money to someone buying these things, we should have had no way of comparing the physical quantities: if a man lived on 1,000 pounds of bread and 30 gallons of beer in a period of time, it would very obviously not be permissible to say that the importance of bread compared with that of beer was as 1,000 to 30. Why should beer be expressed in gallons? If we had written 120 quarts of beer, or 240 pints, the relative importances would have looked like 1,000 : 120, or 1,000 : 240, supposing that we took physical quantity to indicate importance. The point is that no terms of equivalence exist

between pounds and gallons or quarts; we can never say that a pound in any sense *equals* so many quarts; a pound of water equals so many pints of water, but here we are measuring the same quantity of water according to two different scales; the scales themselves are unrelated to each other.

Our criterion of importance is the *value* of the various quantities of the different items, the relative expenditures. In our cotton market, the respective importances are £100, £300 and £40. It is monetary importance that we have in mind. We may feel that bread, the staff of life, is very important, and that champagne, an occasional luxury, is not nearly so important; here we are thinking of importance in providing mankind in general with sustenance. But if we spend £20 on bread in a certain period, and £20 on a case of champagne, consuming both within the period, then, so far as our expenditure is concerned, they are of equal importance.

When we obtain three sums of money to indicate the importances of our grades of cotton, we possess a measure of an inconvenient form; we want a simple arithmetical relation free from units of currency. Thus we say £100 : £300 : £40 :: 5 : 15 : 2—simply dividing by the highest common factor, £20.

This is not a mysterious operation: we say that £300 is spent on grade B and £100 on grade A, therefore B is three times as important in the monetary sense as A; in importance A is to B as 1 to 3, or as 5 to 15, which we wrote in the usual arithmetical manner when we included the importance of grade C as 2.

Now let us use our relative importances in estimating the value of money. What we usually do is not to calculate the value of money directly, but to calculate the price-level of cotton, calling the price of each grade 100 in the first case, and estimating proportionate figures when prices have changed. Each 100—or whatever the figure may alter to at another time—is called the index number of the grade in question. The importances are described as the weights of the different grades. Our operation consists of multiplying the index of each grade by the weight of that grade, adding up the products and dividing by the sum of the weights.

Thus we have six columns to which we will attach algebraical symbols, each with the suffix 1 to show that it belongs to the first period of time. When we compare one year's prices with another's, we describe as the *base year* that year in which we call the indices of all the items 100. Often the first year of a series serves as the base year.

BASE PERIOD

Items	Price	Price level	Quantity	Expenditure	Weights	Weighted indices
	(mp_1)	(p_1)	(q_1) lb.	(e_1) ($= \text{Smp}_1 q_1$)	(w_1) ($= e_1 \div \text{£}20$)	($p_1 w_1$)
A	2s.	100	1,000	£100	5	500
B	3s.	100	2,000	£300	15	1,500
C	4s.	100	200	£40	2	200

$$\text{Thus, } \frac{Sp_1w_1}{Sw_1} = \frac{2,200}{22} = 100.$$

The final figure of our operation is thus the price-level of cotton, of the three grades considered as a whole; naturally it is 100 since we wrote all the prices as 100; it could not be anything else, whatever weights were used.

We should emphasise that it is impossible to avoid weighting an index number; it is not a matter of choice whether we use weights or not, but an inevitable and automatic process. If we wish to consider the purchasing power of money over real income, for instance, we might call the average prices of each income good in 1936 100, and then take the average prices for the same goods in 1937, calling them 95, 107, 110, 115, 84, etc., the difference of each figure from 100 indicating the percentage whereby the price in question had increased or decreased compared with our base year, 1936. Then we might add up our 1937 figures and divide the total by the number of items, so producing an index figure for income goods as a whole. It does not seem as if we have done any weighting; but actually we have done so: we have counted all the individual prices as of equal importance in establishing our income-goods index; that is to say, we have tacitly given each item the same weight, so that we can describe the weights by the series 1 : 1 : 1 . . .

When we added up the prices of the three grades of cotton, at the beginning, and produced an index number for the second period of 125, and a corresponding value of money of 80, we were really using the weights 1 : 1 : 1 for our three grades.

But, weighting the grades properly for the second period, we have:

SECOND PERIOD

Items	Price	Price-level	Quantity	Expenditure	Weights	Weighted indices
	(mp_2)	(p_2)	(q_2)	(e_2)	(w_2)	(p_2w_2)
A	2s. 6d.	125	800 lb.	(= Smp_2q_2) £100	(= $e_2 \div \text{£}20$) 5	625
B	2s. 9d.	91 $\frac{2}{3}$	2,181 $\frac{9}{11}$ lb.	£300	15	1,375
C	6s.	150	133 $\frac{1}{3}$ lb.	£40	2	300

$$\text{Thus, } \frac{Sp_2w_2}{Sw_2} = \frac{2,300}{22} = 104\frac{6}{11}.$$

This figure, $104\frac{6}{11}$, is the price-level of cotton in the second period. The value of money to correspond with it would be $95\frac{15}{23}$, since $\frac{100}{104\frac{6}{11}} = \frac{95\frac{15}{23}}{100}$. Here is a figure for the value of money, to compare with our original 100, which is very different from the figure 80, which we obtained at first by adding up the three prices and writing the price-level of cotton as 125. But this is just what we should expect, for C, the rise in

whose price brought down the value of money so much in the first comparison, is really quite unimportant compared with the other two, and B, whose price actually went down, is the most important of all.

Another point to notice is that the quantities in the second period must be different. Our criterion of importance is expenditure, and, if the importances remain the same, that is the same thing as saying that the expenditures remain identical. If the importances are not the same, there is no basis for comparison, a point which we shall return to examine further in a moment. Thus, if $c_2 \neq c_1$ in each grade, and $p_2 \neq p_1$ in each grade, then $q_2 \neq q_1$ in each grade.

A short-cut method is used, that of the complex commodity.

But now let us observe what appears, deceptively, to be a different case wherein the basis for comparison does not exist, since expenditures are no longer the same as in the base period. Now, we shall consider the quantities to be those of period 1, and the prices to be those of period 2, as follows:

Items	Price (mp_3)	Quantity (q_3) lb.	Expenditure ($c_3 = Smp_3q_3$)
A	2s. 6d.	1,000	£125
B	2s. 9d.	2,000	£275
C	6s.	200	£60

Now $Se_3 = £460$, whereas $Se_1 = £440$, and

$$\frac{Se_3}{Se_1} \times 100 = \frac{£460}{£440} \times 100 = 104\frac{6}{11}$$

The result of the third operation, of course, produces exactly the same answer as the second operation did. In other words, we have an admirable short-cut method for obtaining our index number. We can demonstrate it algebraically, so as to show that it is a proper method applicable to all cases, proving that

$$\frac{Se_3}{Se_1} \times 100 \text{ must equal } \frac{Sp_2w_2}{Sw_2} \text{ as follows:}$$

$$\frac{Se_3}{Se_1} \times 100 = \frac{Smp_3q_3}{Smp_1q_1} \times 100 = \frac{Smp_2q_1}{Smp_1q_1} \times 100.$$

$$\text{Similarly, } \frac{Sp_2w_2}{Sw_2} = \frac{S\left(\frac{mp_2}{mp_1}\right) \times p_1 \times w_1}{Sw_1}$$

$$= \frac{S\left(\frac{mp_2}{mp_1}\right) \times 100 \times mp_1q_1}{Smp_1q_1}$$

$$= \frac{\text{Smp}_2 q_1}{\text{Smp}_1 q_1} \times 100.$$

$$\text{Therefore, } \frac{\text{Se}_3}{\text{Se}_1} \times 100 = \frac{\text{Sp}_2 w_2}{\text{Sw}_2}.$$

What then is this quantity, $\frac{\text{Smp}_2 q_1}{\text{Smp}_1 q_1} \times 100$, to which we find both our formulae for the index to be equal? It is the first year's quantities, each at the second year's prices, divided by the first year's quantities, each at the first year's prices, multiplied by a hundred; or we might call it one hundred times the ratio of the second year's to the first year's expenditure; or, more simply, the second year's expenditure as a percentage of the first year's. (Most of the periods with which we deal are years; it would be equally proper to make up indices covering months, half-years, decades or other periods.)

This simplified method of using the same quantities of the different items of our index at two or more points of time, and supposing the expenditures to change, is a mathematical convenience. What we are really doing is to measure the price-level of a complex commodity, made up of certain specified quantities of particular things: we might compile an index for measuring the price fluctuations of a complex commodity consisting of 1,000 pounds of bread and thirty gallons of beer; the physical quantities are not going to be compared in any way with each other: on the contrary, we shall assume them to be fixed, each at their respective amounts all the time, and the index number obtained must be the same as the one resulting from the assumption that expenditures are the same and quantities alter.

Actual indices of diverse objects are compiled by using the complex commodity method; it is easier. But we must not let this fact lead us to suppose that the quantities are vital; our criterion is that the items in our index remain of the same relative monetary importance.

This does not mean, indeed, that total expenditure must remain the same from year to year; it means that *relative* expenditure must be the same: so long as expenditure is in the proportions 5 : 15 : 2 in our example, the basis of comparison exists: we might have expenditure £200, £600, £80, all double what they were in the base year, for instance; the basis for comparison would still exist.

There are both theoretical shortcomings and practical difficulties in the compilation and use of index numbers: the concept of a general price-level is vague and approximate.

This idea of the complex commodity brings us to an important point of statistical theory. Over a long period of time, or in the comparison of two groups of people living in widely differing circumstances, the weights will

not, as a matter of experience, remain the same; relative expenditures on different items will change. To the extent to which that happens, the basis of comparison is vitiated.

In practice it is too difficult and costly an operation to hold an elaborate statistical enquiry in order to find out whether the relative expenditures on different items are the same; we go on measuring the value of a complex commodity until we have some obvious reason for suspecting that it no longer represents the expenditure of the group we have in mind.

This brings us to the question of whether the concept of a general price-level, fluctuating in relation to itself in previous years, is theoretically admissible. Strictly speaking, it is not: we have no reason to suppose that relative expenditures upon different items remain the same from year to year. We can think of a general price-level as including everything which has existed during the year and is purchasable in normal circumstances with money. It is easier, perhaps, to consider the index as being that of an extremely complex commodity, made up of both income goods and capital goods. But since we may feel sure that this very complex commodity does not remain stable in content, either for one nation or for the whole world, we must remember that we are dealing in terms of a rough approximation, whose theoretical precision the very march of progress invalidates. Similarly, if general warfare breaks out, and the economies of the nations are consequently warped to military ends, then, clearly, durable goods currently produced change in nature significantly: instead of houses, battleships are being built, and guns instead of motor-cars. Thus the complex commodity no longer includes so many houses and so many battleships, but more of the latter and less of the former, for some houses will have become worn out and replacement building notoriously falls off in time of war.

When we think of our approximate general price-level, we have in mind the values of income goods to the public as consumers, plus the values of capital goods to the public as owners of wealth. Thus we must be careful to include everything existing during the year once only. If we included a certain thing, let us say cotton, every time it was the object of a monetary transaction, we should be counting the same thing twice or more: some parcel of cotton might be sold a dozen times among members of the cotton market. What we ought to do, then, is to reckon that parcel of cotton once only at the average of the twelve prices at which it has changed hands. Even if we imagine a general price-level estimated in this way, however, we are formulating only an approximate concept.

No general price-level is in fact compiled in this way because the practical difficulties, collecting the various prices and assessing weights strictly appropriate to the base year, and approximately relevant to subsequent ones, prove to be difficulties which are insuperable in practice.

Approximation is, indeed, general and inevitable in the compilation of index numbers; new commodities offering fresh difficulties; and old goods becoming false categories.

In the compilation of index numbers in practice, the process of approximation is indeed typical. This is why index numbers are usually worked out to the nearest integer: if we worked them out to fractions, or to two or three places of decimals, that would give a quite false appearance of precision.

It is not in our power to overcome this inexactitude: most index numbers must inevitably be approximate. The theoretical shortcomings (with which we have not yet finished) are ineluctable in a changing world; and at no time which we can foresee in the future could the theoretically best methods of compiling index numbers be put into operation.

Yet there exist in many countries index numbers of great importance, for all their roughness, in arriving at a sensible public policy. The two most common ones are the index of wholesale prices and that based on retail prices. The former is of more particular interest to business men in general since they are the people who buy and sell at wholesale prices.

Indices based upon retail prices are compiled principally for measuring the cost of living to poor persons. In this case, as we should expect, investigation shows that the composite commodity representing necessities of life (including, of course, rent, lighting, heating, etc., as well as food-stuffs) to the lowest strata of income-receivers changes but slightly over decades, unless a major war occurs, bringing in its train, as it usually does nowadays, a revolution in the proportions of the national income going to the different classes in the belligerent countries.

✓ One of the most dangerous forms of approximation in economic statistics is the practice of applying indices to groups of persons to whom they do not strictly relate. Thus it is dangerous to apply the cost of living index to the middle classes since the things included in the index, and their weights, belong to the poorest sections of the community.

No basis of comparison exists, as we have said, between strata of a population purchasing substantially different things, or the same things in markedly different proportions. If we possessed two cost of living indices, one for the poor and one for the rich, called them each 100 in the base year, and found that, whilst the rich persons' index had advanced to 120, the poor persons' had fallen to 90, it would be inadmissible to deduce from these facts alone that the purchasing power of money was too high to the poor compared with its purchasing power to the rich. That would be true only if some sort of equilibrium had existed between the two purchasing powers in the base year. We have assumed this to be so if we describe the relation 120 : 90 as an improper one, and such an assumption would require an elaborate argument to justify it.

One index, sometimes identified wrongly with the general index, may be

described as the transactions standard. Here, a standard means an index for measuring the value of money according to a particular criterion. The criterion is the volume of transactions entered into in respect of the different items. But the volume of transactions measures the importances of commodities to dealers in money as such, and we are not interested in dealers in money as such. When we think of the public, we are interested in a national group as consumers and as owners of wealth.

Two price-levels which have figured largely in monetary theory, as we shall find in Chapter IX, are those of consumption goods available to the public, and of output as a whole. Some output, obviously, such as dies and machine tools, is used almost exclusively in productive processes and is not, in this sense, available to the public for consumption. But it is clear that the public which consumes available output, and deals as producers and consumers with aggregate output, is not to be compared with itself at different times if available output and aggregate output each come to mean different things to it. These price-levels will prove to be interesting in themselves, but they cannot be applied strictly to the comparison of the value of money to the public at different times.

A particular case of a change in the composition of output is the introduction of a new commodity. If, for example, the public begins to eat some new patent food in place of bread, it will not be permissible, in strict theory, to compare the same group in two periods, the first being before the introduction of the new food and the second being afterwards. What is really in question is the validity of the weights: before the new good exists, clearly its weight is zero; afterwards its weight will become of significant size; therefore a scheme of weights neglecting the new food no longer applies to the expenditure of the group in question. It might seem that new goods are troublesome to deal with (which is true), but that old goods do not cause us any difficulty; yet the latter is not the case.

For an example, let us go back to the time before World War II. We then took stock of prices, observing the price among other things of Player's Navy Cut cigarettes: if a packet of twenty cost 1s. ten years before and 1s. in 1937, we should have said that the price was the same. But was the packet of 1927 really the same as the packet of 1937? In the latter year the cigarettes may have been larger, better in quality and better packed; improved methods of distribution may have enabled the public as a whole to obtain fresher cigarettes. The names of commodities may remain unaltered, while the realities change, often enough in subtle and obscure ways; and not always for the better.

✓ We may say then that our categories, the items which compose our indices, are often false categories; and the longer the time over which comparison is attempted the falser they frequently become. Consider, for instance, the falseness of the category 'motor-cars.' To take another example, suppose that what is called the quartern loaf were substantially better, or worse, in quality than during last century, while the price is unchanged: there is, nevertheless, a concealed alteration in the value of

money, as expressed by the price of bread, or by any index into which bread enters as a component item.

✓The point should be stressed that, as well as new things becoming purchasable with progress, some old ones cease to be purchasable with the passage of time; further, that articles which are identical at one place have widely discrepant significances in different places. As Lord Keynes wrote: "We are not in a position to weigh the satisfactions for similar persons of Pharaoh's slaves against Fifth Avenue's motor-cars, or dear fuel and cheap ice to Laplanders with cheap fuel and dear ice to Hottentots."¹

Changing the weights for the sake of precision would vitiate the basis of comparison.

In conclusion it is worth while perhaps to demonstrate that weights must be kept the same if a comparison is to be made. If we adopt the complex commodity short-cut, our complex commodity must remain of fixed content. It might seem that we could, in theory, change the weights, making them precisely appropriate to each period. But we can show that such a proceeding can produce a ridiculous result. It is true, too, that changing the weights must always distort the final figures, but to demonstrate this would require a long and elaborate argument too large for inclusion in the present book.

Thus let us consider the case of a man spending £18 upon two commodities, A and B, in three successive years, with the following varying distributions:

			£	s.	d.
1.	A	148 units at 1s. ...	...	7	8 0
	B	106 units at 2s. ...	...	10	12 0
				£18	0 0
2.	A	120 units at 1s. 3d. ...	...	7	10 0
	B	120 units at 1s. 9d. ...	...	10	10 0
				£18	0 0
3.	A	80 units at 1s. 3d. ...	...	5	0 0
	B	148 $\frac{4}{7}$ units at 1s. 9d. ...	...	13	0 0
				£18	0 0

If we do not keep the same weights, we shall take, in our example, the number of shillings for each item in each case, so that the sum of the weights will be always 360.

¹ *A Treatise on Money* (1930), vol. I, p. 104.

Therefore,

$$\frac{Sp_1w_1}{Sw_1} = \frac{100 \times 148 + 100 \times 212}{360} = \frac{36,000}{360} = 100;$$

$$\frac{Sp_2w_2}{Sw_2} = \frac{125 \times 150 + 87.5 \times 210}{360} = \frac{37,125}{360} = 103.1^1$$

$$\frac{Sp_3w_3}{Sw_3} = \frac{125 \times 100 + 87.5 \times 260}{360} = \frac{35,250}{360} = 98.1^1$$

We have shown that, if we change the weights, then the price-level falls from 103 to 98 as between the second and third years. But this is absurd, since the prices prevailing are the same. Thus we may say that a method wherein the weights are changed to suit the different years precisely does not produce a valid comparison. To put the matter in simple everyday words, the idea of changing the weights is rubbish and nonsense.

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¹ To the nearest integer.

CHAPTER VIII

THE VALUE OF MONEY: QUANTITY THEORY

\ *The value of any economic good decreases as the quantity of it increases: so it is with money.*

THE Quantity Theory of the value of money, of which a simple description follows, is only the first approximation towards an answer to the complex and difficult problem of why at any moment or over any period money has a certain amount of purchasing power and not a different amount. Yet the remaining stages of an advance, not yet finished, towards a complete understanding of the value problem will be made easier by this first step. Both Prof. Harp and Dr. Carp would agree that it is a step in the right direction; and the method of successive approximations has the blessing of the pure scientists.

We are familiar with the general idea that the more there is available of any commodity the less its value becomes. Demand curves slope downwards in the sense that, if a manufacturer wants to sell more of his product, he must lower the price. In general, the fact of being rare is enough to make a thing valuable, and we can put the same idea in more comprehensive form by saying that quantity and value vary inversely. Prof. Harp would insist that we add to these propositions the saving phrase, other things remaining equal; and so, strictly speaking, we should do; but perhaps we may plead with Dr. Carp that here, as elsewhere, *ceteris paribus* should be understood where common sense requires it.

The inverse variation of quantity and value applies to money also. If we find ourselves suddenly possessed of 50 per cent more money than usual, we enjoy a pleasant feeling of affluence, and we incline to buy things which seemed too expensive hitherto. Although it purchases the same things as before, money does not seem so precious because we have more of it; we should feel just the same about any other commodity. But suppose that the Government began to manufacture inconvertible Treasury notes and one morning sent to everybody a sum equal to 50 per cent of the money each person possessed: there would be a riot to get near the shops, for everyone would feel so rich that they would all try to spend more than usual at once. The only way for shopkeepers to prevent their entire stock being sold out would be to put up prices, and quickly to order more goods from the wholesalers; but, if all retailers were ordering more, wholesalers would have to put up prices, and then manufacturers would, and so on, until all prices had been forced up enough. But if all prices went up, then the value of money has gone down; that is the effect of increasing its vol

by 50 per cent, and, of course, a bigger depreciation in the value of money would be caused by increasing the quantity 100 per cent, and money's value could be increased by decreasing the quantity of it.

We have made one assumption here, namely that the extra money would be spent. In the hypothetical circumstances of our example that was a reasonable assumption. However, people *might* say to themselves: "This is a very odd happening: we have never known the Government to give money away before; quite the reverse; we had better put this money in the safe in case they ask for it back again." Then there would be no effect, of course, upon spending, upon prices or upon the value of money. It will be useful to bear in mind that the assumption has been made that the extra money would be spent.

But the velocity of money is also a determinant of its value.

But there is another factor affecting the value of money: the speed at which it circulates, which is usually called the velocity of circulation of money, or, more shortly, the velocity of money. For money is used, of course, to buy things, and what we have in mind when we speak of velocity is how many times it is used to buy something within a given period. Let us compare two states of affairs: in the first, let us suppose that, on the average, money is used to buy something once in a week; for the rest of the time it is lying idle in someone's possession; in the second case, suppose that money, on the average, is used to purchase things twice a week. Let the amount of goods sold be the same in both cases: then in which case is the greater quantity of money required? Clearly in the first case, wherein the velocity was slower. So we may say that as the velocity of money increases, less of it will be required; therefore an increase in velocity affects the value of money in the same way as an increase in its quantity affects it. In general terms, then, the value of money varies inversely with its velocity, as well as inversely with its quantity.

This is not perhaps an easy matter to understand; an example may make it plainer; in trying to make the example simple, we shall necessarily make it somewhat artificial.

A certain man decided to employ a hundred unemployed at £1 per man per week; he housed the men upon his estate, and set up a store which was stocked with provisions worth £100 every Saturday night; on Sunday the men were paid and promptly spent all their wages, thereby emptying the store; each £1 bought a man's provisions for the week. The employer kept £100 in notes for the purpose of paying wages; there was thus a short period on Sunday when the whole of the £100 was in the possession of the men. One Wednesday night, the shed containing fifty men's provisions for the rest of the week was swept away into the sea during a gale, the provisions being lost entirely. The employer had the store filled with £50 worth of goods during the night and paid the fifty sufferers their wages, half a week early, before they began work on Thursday morning; the fifty men thereupon cleared the store of its provisions. Thereafter payment and

expenditure were effected twice a week, half early on Thursday and half on Sunday. Then the employer observed that of the original £100 half never left his possession; the same £50 was paid out and received back on Thursday and paid out and received back again on Sunday. He therefore invested the idle £50, finding the scheme would work without it. In this case, the velocity of £50 doubled; it did the work hitherto done by £100; we may say, to use another word, that the *efficiency* of the £50 was doubled. It is evident that the employer no longer needed so much of his wealth in the form of money; his demand for money declined because the velocity of part of his money increased.

The demand for money to hold is the opposite of the velocity of circulation.

When we speak of the demand for money, we must be quite clear about what we mean: we do not mean the demand for wealth nor for income. Demand for the latter may be insatiable; demand for money is limited. We may want unlimited wealth; we do not want an indefinitely large proportion of our wealth in the form of money. When the employer found that he did not "want" the second £50 any more, that did not mean that he destroyed it or gave it away; it meant that he did not want so much of his wealth in the form of money; he preferred the second £50 in the form of an investment which would earn interest.

This brings us to the question of why people want any of their wealth in the form of money; after all, money does us no good until we get rid of it. The matter was put very simply and clearly by the late Prof. Cannan. He explained¹ that the demand for money was a demand for money *to hold*. We require money to keep, in the bank, in the form of a deposit, or in the form of currency in our pockets. We need it in order to have the means of making our everyday purchases, and to have something available immediately, if possible, to meet a sudden emergency. The amount of money we hold varies; in many cases, it dwindles away until, as pay-day approaches, there is little or nothing left. But, *on the average*, everybody (except small infants) has something; everybody's average holding is the demand for money.

Now if we think about this, we shall see that the demand for money to hold varies inversely with the velocity of circulation. The more quickly it passes from hand to hand, or the more frequent the pay-days and spendings, then the less money is required to be held at any time in order to buy the same amount of goods at the same prices. And, if we increase the speed of money, keeping the quantity the same, that will have the same effect as a proportionate increase in the quantity of money while its speed of circulation remains the same; in either case, the value of money goes down, or, the same thing in other words, prices in general go up.

Conversely, if people decide, perhaps because political events have frightened them, that they ought to be holding more money, and if they

¹ Edwin Cannan, *Money* (1935), pt. II, sect. 2.

proceed to do so, that is an increase in the demand for money, or a fall in the velocity of circulation, which will induce a fall of the price-level and thus an increase in the value of money.

The demand for money is not always the same; and changes in it can have far-reaching effects. We may notice at this point some simple instances of seasonal changes in the demand for money, although it is not these which have the most important results. At Christmas, for instance, there is a marked increase in the demand for one sort of money, currency, to be held for only a short time before being spent on presents and festivities. The Christmas demand for currency is an example of what is called the seasonal variation in the demand for money. A more important seasonal variation is the one which occurs in agricultural countries, like Canada, when the crops are being harvested; then, within a short time, many of the inhabitants' yearly income is being paid all in one block. The demand for money to be spent in buying the crop becomes acute, and in fact the monetary authorities let the quantity of money increase at that season so as to stop the increase in its value which would occur otherwise; for it would be very inconvenient if prices in general were to fall noticeably for a short period every autumn.

* *The elasticity of demand for money is said to be equal to unity; but that is to take the static view of a dynamic world.*

If a decrease in the price for a commodity causes a more than proportionate increase in the amount of it sold, we say that the demand for the good is elastic; and, conversely, if a decrease in price causes a less than proportionate increase in the amount sold, we say that demand is inelastic. Similarly, of course, with increases in price and the consequent decreases in demand. What about the elasticity of demand for money? It is said that money's elasticity of demand is equal to one, or to unity; this means that an increase in the value of money will cause an exactly proportionate decrease in the demand for it, and conversely that a decrease in the value of money will bring about an exactly proportionate increase in the demand for money to hold. If the volume of money held by the public is increased by $33\frac{1}{3}$ per cent as the result of arbitrary action on the part of the monetary authorities, that is, if the volume is multiplied by $\frac{4}{3}$, then the general index will also be multiplied by $\frac{4}{3}$, and the value of money by $\frac{3}{4}$. The argument runs thus: if everybody's supply of money were suddenly doubled, then all prices would as quickly be doubled also; that is, its value would be halved. But this is what is called a static idea: at the first point of time (state 1), the volume of money was 100; at the second point of time (state 2), its volume was 200, its values being respectively 100 and 50. The world, however, does not move suddenly from one set of circumstances to another; in actual fact, the volume of money does not double during the night, but usually changes very gradually, and the effects of the almost unnoticeable increase are different according to the different parts of the monetary structure in which the increase may occur.

For instance, suppose that bankers create more money by giving credits to cotton cloth makers: the first thing that happens is that the price of cotton yarn goes up, because weaving firms have more to spend in buying the produce of spinners; receiving more money, spinners increase output and compete more keenly in the raw cotton market, so driving up the price of raw cotton, increasing the receipts of the cotton brokers and causing them to offer higher prices to growers, who thereupon put more land into cultivation. As these effects are occurring, the wages of workers may go up, which will increase the turnover of shops. In the end, the equalising effect of competition on profits will no doubt spread the rise of prices over all goods equally; that is to say, if one line of business is more profitable than another, producers will desert the less profitable lines and go in for the more profitable ones, so reducing the profits of the more profitable by their competition and increasing the profits of the less profitable by withdrawing their competition. But this happens only in the long run, and the long run is not always interesting.¹ Long before the final effects of giving additional credit to cotton weavers have worked themselves out, other short run effects have dwarfed the former into insignificance. Economic life is the resultant of conflicting short-run effects. It is the study of the short-run, of the gradual changes which we meet in real life which is described as the dynamic approach; this is contrasted with the very theoretical static aspect of economic phenomena. The static view has its uses in illustrating the principles governing economic relationships, but it is essentially an abstraction, a simplification, of which we cannot find exact examples in the real world where multitudes of conflicting tendencies operate simultaneously.

Quantity Theory has been reduced to the equation $MV = PT$, the short run being presented as a period of transition; but since actuality is a perpetual transition the usefulness of the theory is limited.

We usually think of Quantity Theory in the form of a statement to the effect that the value of money depends upon its quantity and its velocity of circulation. But we could equally well turn the idea upside down and say that the price-level depends upon the volume and upon the velocity of money. The most concise form of expressing the idea was achieved by the late Prof. Irving Fisher² who stated it as an equation: $MV = PT$, where

- M equals the volume of money;
- V equals the velocity of circulation of money;
- P equals the price-level;
- T equals the volume of transactions.

It has been pointed out, indeed, that the equation, which is known as the equation of exchange, is little more than a truism: suppose the volume of

¹ cf. J. M. Keynes, *A Tract on Monetary Reform* (1923), p. 80.

² Irving Fisher, *The Purchasing Power of Money* (1911), especially ch. ii.

money is £1,000,000, and its average velocity of circulation is 10 per annum; then $MV = £10,000,000$ per annum; that is to say, annual expenditure is £10,000,000. But what is $P \times T$? T is the number of things sold per annum and P is their price-level; if we multiply P by T , then, we get the value of annual sales. So all the equation states is that annual expenditure equals annual sales, and these, after all, are two names for the same thing. The equation does not prove anything; it was never meant to do. But it is an exceedingly useful way of stating Quantity Theory because it enables us to think with mathematical clarity and precision. Thus, we can compile a large number of propositions which are certainly true: we can say this sort of thing:

1. If V and T remain constant and M increases, then P must increase.
2. If M and T remain constant and V increases, then P must increase.
3. If M and P remain constant and V increases, then T must increase.
4. If M and V remain constant and T increases, then P must increase.

And so forth. Prof. Irving Fisher implied (for the sake of simplicity and convenience) that there were no *autonomous* movements on the part of P , but that it always changed as a result of a movement in one of the other terms. It has been argued since that P can start a movement and cause one or more of the other terms to adjust itself; this happens, for instance, if a wave of pessimism sweeps over all the markets, causing sellers to mark down prices.

When we speak of one of the terms bringing about a change in another, we must be quite clear what assumptions we are making tacitly. If all four terms remained constant, we should describe that as a condition of equilibrium, which never, of course, exists in the world of actuality. And when we supposed, in the propositions instanced above, that two of the terms remained constant, we are making the assumption of static conditions; when an economic quantity changes in our dynamic world, others do not stay put; they are affected and begin to vary too. But it is true that if there were a condition approximating to equilibrium prevailing and this was suddenly disturbed, let us say, by a large increase in M , after all the other terms had been profoundly affected thereby, there might appear a new condition of approximate equilibrium in which V had reverted to about its former figure and T also; the net effect would be an increase in P balancing the increase in M . This is, of course, all that Prof. Irving Fisher claimed that he had shown by his equation; that it illustrated the *ultimate* effects after the period of *transition* was over: "These permanent or ultimate effects follow after a new equilibrium is established . . . if, indeed, such a condition as equilibrium may be said ever to be established."¹

We have come back, in fact, to the position which we reached before: the precise propositions which we can derive from the equation, $MV = PT$, depend upon the assumption of stability in one or two of the terms of the equation, and this assumption is true to actuality only in the long run.

¹ Irving Fisher, *The Purchasing Power of Money* (1911), p. 56.

In the short run, there is a period of transition, wherein all the terms are varying. And in the actual world, there are so many and so great impulses disturbing the tendency to equilibrium that economic life is a permanent transition. Equilibrium is like to-morrow—it never comes; for as soon as the grey streaks of dawn appear, to-morrow means something else; as soon as the tendency to equilibrium has begun to compensate for some disturbance, something else happens and the equilibrium to which we are tending means something else. It is true that water tends to assume a roughly flat surface, but if we keep on throwing stones into a pond, we not only disturb the flat surface which it is trying to assume, we also make it try to assume a slightly different flat surface, since the level of the water alters as we fill up the pond with stones.

The Quantity Theory of money is a concept of long-run phenomena. It has its use in illustrating the forces at play, but it will not enable us to reach mathematical results in a short-run world. We cannot say, for instance, that if we add 10 per cent to M , there will be, after a few weeks' transition, a 10 per cent rise in P ; the transition goes on for ever, and other disturbing factors always prevent our experiencing isolated long-run effects.

It should be mentioned that Prof. Irving Fisher provides several sets of identities in his elucidation of Quantity Theory. If $E =$ expenditure, $\frac{E}{M} = V$. Then he considers all prices which he calls $p_1, p_2, p_3 \dots$, and all quantities of goods sold, which he calls $q_1, q_2, q_3 \dots$, and these all add up to Q . Then $MV = SpQ = PT$. But when Prof. Irving Fisher speaks about money, he means what we have called currency, so that MV really takes no account of the biggest group of money which exists, that is to say, bank deposits. He therefore rewrites the equation to include all forms of payment as $MV + M'V' = PT$, P now meaning the price-level of all goods and not only those bought with currency; T , similarly, meaning all transactions and not only those effected with currency; and M' signifying the volume of bank deposits, and V' their velocity. Then it is suggested that M' always bears approximately the same relation to M . And this is but the beginning of a very interesting line of investigation; but the rest of Prof. Irving Fisher's enquiry is too specialised for the present discussion.

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CHAPTER IX

THE TRADE CYCLE: LORD KEYNES

Monetary theory has become subordinated to the great economic problem of our times, depression.

ONE might well imagine that 'monetary theory' would propound how much money a community ought to have and what the purchasing power of the monetary unit ought to be. It might be supposed that the theory would be applied to data comprising the productive resources, population and institutions of a country so as to deduce from these the proper principles to guide the authority responsible for deciding the volume of money. Although such principles are the practical objectives of monetary theory, the process does not go on exactly in the way suggested. Rather is the working of the body economic accepted as something natural like the working of our human bodies, until something goes wrong. Then the public, led by the politicians and the organs of opinion, cries with a loud voice to the economists to know what has gone wrong; and if Dr. Carp answers in his businesslike way "put down Bank Rate," while Prof. Harp contends that there is a "fundamental disequilibrium in the economic system," the public is liable to become little wiser as to the nature of the evils.

The evils, indeed, have been many and serious since World War I, so that it is not surprising that monetary theory and economic theory in general have become absorbed in the study of problems of unemployment, idle plant, excess stocks, rapidly rising or falling prices and similar things. Perhaps it is easy to forget, when years of full employment and material shortages have followed wartime deficiencies of men and goods, that unemployment and surpluses have been the chief curses of the last thirty years; and it might seem perhaps that our present restricted circumstances alone call for study, for understanding and for remedy. Such a view while commanding ready sympathy would be quite wrong. In the first place there are no difficulties preventing an understanding of our present plight: this will be touched upon in Chapter XIX. Moreover, in the second place it would be a mistake to suppose that we have finished with the trade cycle or that unemployment and surpluses are gone for ever: it would be a serious mistake with serious consequences to indulge such optimistic ideas. If we are going to deal successfully with the next depression we need to understand its nature and its causes beforehand; we do not want to find ourselves again in the circumstances of the 'thirties when we were endeavouring to diagnose the disease while suffering from its effects.

It was easy in those days to perceive that employment depended on profits, for in general employers cannot afford to offer employment unless profits can be expected from the enterprise; and profits are reckoned in money. So it seemed that money was at the root of the trouble, and therefore that the monetary theorists ought to have something to contribute to an understanding of the ills. Thus monetary theory has been concerned for a generation, partly with wildly rising prices it is true, but to a much greater extent with the recurrent depressions and with economic stagnation.

Now it was noticed over a century ago that good trade and bad followed each other somewhat regularly. In the nineteenth century the period occupied by a sequence of depression, recovery, prosperity and crisis usually lasted about ten years. Such a sequence is known, of course, as the trade cycle; but we no longer believe to-day that there are ineluctable forces or even forces very likely to assert themselves in the absence of corrective action, which will cause the trade cycle to last just about ten years. It used to be thought, too, that, in a period of depression, "things will right themselves with time"; that unemployment would disappear in due course; that it was in some pseudo-moral sense *right* that prices, including wage rates and interest rates, should fall, and then prosperity would return. Such unfocused feelings really derived from a simple argument, *post hoc ergo propter hoc*: it had happened like that in the past, so in future the same would recur. True, the economists had some carefully reasoned arguments to say why events, particularly fluctuations of a cyclical nature, should come about; but as time went on their explanations fitted the facts less and less adequately. In particular the intractable problem of chronic unemployment blighted the life of Britain between the wars; and then the great depression struck the more highly developed countries one after another, inflicting such misery as was rightly considered intolerable.

It was the late Lord Keynes above all who perceived what was wrong, and why.

For an understanding of depression, Keynes sought successive avenues of approach.

Keynes wrote nine books, of which three were concerned with the problems of monetary theory, with the trade cycle and with chronic depression. Of these three the first, *A Tract on Monetary Reform* (1923), remains a thoughtful and interesting work, illumined by the brilliance of its author; but the main theoretical argument of the *Tract* is no longer living. It was Keynes himself who pointed out most cogently its imperfections.¹ Thus we may say that the *Tract* is to-day of significance only to students of the development of economic thinking.

The second work of Keynes which we should notice is *A Treatise on Money*, of 1930. This large work, its first volume theoretical and its second

¹ *A Treatise on Money* (1930), ch. xiv, sect. 1.

historical, was a much greater undertaking than the *Tract*. The vivid originality, profound insight, and bold pioneering of the *Treatise*, phrased with all of Keynes's scintillating command of English, must for ever require respect. Moreover, the dominating thoughts, though failing to achieve final forms, were the bases for his later work. Many of the concepts of the *Treatise* no longer stand to-day, so that that great work too has become the field of the specialist—and rich is his harvest in it still. For the *Treatise* was to Keynes only another stepping stone to his last and greatest work, *The General Theory of Employment, Interest and Money*, published in 1936. Yet if we say this of the *Treatise* it is only proper to add that practically all of the ideas of the *General Theory* may be found in rough form in the *Treatise*; the words or their definitions are different, but the ideas are there. Perhaps it is unkind but it is certainly just to comment that some who were surprised by the revolution in economic thinking occasioned by the *General Theory* should not have been caught thus unawares: a greater attention to the virtues of the *Treatise*, even at the expense of the rigorousness of their examination of its imperfections, would have saved Keynes's critics from that.

Recognising that the volumes of employment and of output are the quantities which matter, Keynes began in "The General Theory" by defining "involuntary" unemployment; he proceeded to show that three independent variables (the propensity to consume, the schedule of the marginal efficiency of capital and the schedule of rates of interest) determine employment.

We saw in the last chapter that the value of money derived from the demand for it. Something akin to this forms the subject of a considerable part of *The General Theory*. But Keynes enquired about the demand for money (and for securities of different sorts) only in order to explain the things which really matter, namely, the volume of employment and the volume of output. He showed why it is that there may be a tragically large proportion of the working population in involuntary idleness—"involuntary" in the sense that the unemployed would willingly accept employment, if they could find it, at lower real wages than employed men are receiving.

Keynes showed that the state of employment depends on three things. These he called (i) the propensity to consume, (ii) the schedule of the marginal efficiency of capital, and (iii) the schedule of rates of interest. These three independent variables are themselves capable of further analysis. Thus they are only proximate determinants: all manner of things may be altering in the economic system, and some of them at least are in a perpetual state of flux; but such deeper alterations take effect upon the volume of employment (and thus upon the volume of output) always through the three independent proximate determinants, the propensity to consume, the schedule of the marginal efficiency of capital, and the schedule of interest rates.

We may think of the propensity to consume as being a proportion of the current monetary income of the community. Let us guess for the purposes of illustration that the proportion is three-quarters. This means, then, that the public attempts to consume three-quarters of its income; the remaining quarter it attempts to save. It is important to observe that these are propensities: the fractions are intentions in the collective mind of the community; there is no certainty that the intentions or attempts will be realised; indeed, there is a strong probability, amounting to a certainty at some phases of the trade cycle, that the attempts will necessarily be overborne by stronger forces, which arise in part none the less from the complementary propensities to consume and to save.

But if we assume for the purpose of explanation that the propensity to consume is three-quarters and thus that the propensity to save is one-quarter, we need to be on our guard against making the problem of the trade cycle simpler than it really is. In fact the propensity to consume will not remain stable throughout the successive phases of recovery, prosperity, crisis and depression. The chief of its changes is, however, a relatively simple matter: the propensity to consume declines as income increases; or, to put the matter another way, as monetary income increases, expenditure on consumption will increase also but neither by so large an amount nor by so large a *proportion*.¹ Thus if we consider an economy moving from depression,² through recovery² into prosperity,² we may imagine the propensity to consume as moving through a series of fractions, $\frac{5}{6}$, $\frac{4}{5}$, $\frac{3}{4}$, $\frac{2}{3}$. The propensity to consume is thus in the mathematical sense a *function* of income. For in depression the monetary income of the community will be low, and therefore the propensity to consume will be high; as the income increases from a very low figure there might indeed be a short-lived *increase* in the propensity to consume, but soon the normal tendency will reassert itself and the propensity to consume will decline with the growth of income. Thus a series $\frac{5}{6}$, $\frac{6}{7}$, $\frac{5}{6}$, $\frac{4}{5}$, $\frac{3}{4}$, $\frac{2}{3}$ might be nearer to the truth than the simpler series suggested before; but the salient point is the decline as income increases.

If we think of the propensity to consume of individuals, then the reason why the community's propensity to consume behaves as it does will be seen readily enough.

If we suddenly become richer, we are in a position to replan our expenditure on a grander scale. Very many people possess some unfulfilled desire which cost ordinarily prohibits: A wants to go to the Catalonian coast for a holiday, B to buy a car, and C to give £50 to a charity whose

¹ Using symbols, we may say $E_c = \chi L$, where E_c = consumption expenditure, χ = the propensity to consume, and L = the income of the community.

² It may be convenient to think of depression as anything worse than 10 per cent below the 'normal' standard of living of the community; of recovery as stretching from 10 per cent below normal to 10 per cent above; and of prosperity as anything more than 10 per cent above normal. But the "normal" standard of living is itself improving, of course, with the passage of time: progress in the productive arts will be raising the standard of living perhaps at about 1 per cent per annum.

good work has long appealed to him strongly. Many people, enjoying greater affluence, will satisfy such a long-standing wish, but few will spend all of their increase in income. Some, buffeted by the waves of disappointment, will feel that a big part of the increase should be laid aside, perhaps simply because the greater income feels too good to be true; they are almost afraid of it; or perhaps because they are naturally cautious, which is the same thing as saying that their long-standing desire is to achieve security. Others merely feel that they would like to have some money to play with, and, so much do they enjoy planning how they will play with it, that, in the end, they never do play with the whole thing; a few will play with only a little of it, and a fraction with none at all. In very ordinary ways like these, then, increased income tends to be spent in a less proportion than the lower income of earlier times. Or, using Keynes's words, we may say that the propensity to consume declines as income increases.

The two schedules are time schedules. Apart from considerations of risk arising from the purpose of the borrowing, the longer the time before the repayment of a debt the higher is the rate of interest which must be paid on it. An example of this may be seen in the borrowing of the British Government: when the great conversion operation was carried out, in August 1932, the Government was virtually borrowing money, for repayment after 1961, at $3\frac{1}{2}$ per cent (since those possessing 5 per cent War Loan were entitled to be paid back instead of having their stock converted); the same week it borrowed money for repayment in three months' time at just over $\frac{1}{2}$ per cent. Thus, although we speak shortly of 'the' rate of interest for convenience, there is really an indefinitely large number of rates corresponding to the indefinitely large number of periods of time for which money can be borrowed. Considerations of risk, like the risk of auriferous ore being exhausted in a gold mine, are always involved as well, but we are not concerned with them here.

We must not say, indeed, that short-term interest rates are always lower than those on securities whose repayment date is relatively distant. When investors feel very confident of the general stability of dividends and interest, they may consider that short-term bonds would be a nuisance; securities in which their funds could be left safely for a long time might seem less trouble; the rapid changing from one security to another might, at the same time, offer little scope for ingenious profit-making. Such conditions were not uncommon during the last century. But in more modern times, when the future seems more uncertain, we can perceive the advantage of the earlier repayment date simply enough: if a man can feel that at the end of next year he will definitely get back the whole of his invested money, he is in a safer position than another man who has to depend upon selling his securities on the Stock Exchange where their value may fall heavily. And the more people bid for the attractive short-period investments, the lower becomes their rate of interest.

The marginal efficiency of capital is, roughly speaking, the profit which business men expect from new investment; here again, there is not a unique

rate, but a time schedule of them depending upon the period for which the investment lasts.

Now if the various profit rates which make up the schedule of the marginal efficiency of capital lie above the schedule of interest rates, investment becomes attractive. It is not necessary, of course, that every rate in the former schedule should be above the corresponding one in the interest rate schedule: the conditions of investment expected to be profitable will be present if some part of what we may alternatively call the prospective profit schedule is above the interest rate (the cost of borrowing) schedule.

Thus the schedule of interest rates is something objective which consists of quotations in the Money Market. But the schedule of the marginal efficiency of capital is something subjective existing in the collective mind of entrepreneurs. Let us imagine that an economy has long been in a state of depression: stocks of goods, too high at the start of the depression, will have been largely eaten into; profits will be small, but productive capital goods such as buildings, machines, etc., will be so nearly worn out in many cases that they simply cannot be made to last much longer; prices of productive capital goods will be low so that money taken from depreciation funds for spending will receive good value; there is great unemployment so that an early advance of wages is not to be looked for. Moreover the propensity to consume will be high at such a time, and it is consumption expenditure, of course, which provides the community with a large part of its income. There are other attendant conditions, indeed, which should be taken into account, but perhaps enough has been said to suggest that, with or without some fortuitous boost from outside, circumstances are right for the schedule of the marginal efficiency of capital in men's minds to move upwards. Entrepreneurs come to feel at last that investment prospects are really better. Now if, as will normally happen, the schedule of interest rates stays as it has been, at the minimum set of figures which it reaches in depression, then the inducement to invest has improved, since the cost of borrowing is as it was before while the prospective proceeds from borrowing have improved: therefore borrowing for the purpose of investment increases. It is the spending of greater investment moneys which lifts the economy out of depression.

But before we can continue with a description of the trade cycle along Keynesian lines, we must investigate the dynamic relationship between savings and investment. It may be useful, however, if we anticipate the findings of the Keynesian analysis to the extent of saying that the trade cycle is essentially a fluctuation of the schedule of the marginal efficiency of capital; not a fortuitous fluctuation, of course, but one whose causes are becoming more clearly understood as the full import of the Keynesian revolution sinks into the subconscious minds of theorists and of investigators. More exactly we should say that the trade cycle is a fluctuation of the schedule of the marginal efficiency of capital in relation to the schedule of interest rates.

As redefined in "The General Theory," savings and investment are necessarily equal; by causing income to vary, investment determines savings; though some investment may be "involuntary."

As we have seen, if there were a considerable gap between the schedule of the marginal efficiency of capital (or prospective profits) and that of interest rates, the former being the higher, then conditions for investing would be favourable. If we have in mind the end of a period of depression, when the economic system has been all too painfully stable or in what we may call a condition approximating to equilibrium, then with the improvement in the schedule of the marginal efficiency of capital a higher rate of investment will develop, compared with the meagre rate characteristic of slumps. This is obviously sensible: for the inducement to invest certainly does depend, as we have seen, upon the cost of borrowing and the profits expected; only if the former moves upward proportionately with the latter will the inducement to invest remain as it was. But in our experience the cost of borrowing, or the schedule of interest rates, does not begin to harden at once as the economy lifts itself out of depression; there is a very considerable lag; and before interest rates have caught up, the greater investment induced has altered again the prospects for the future and still for the better. Evidently we are concerned with a theory showing that the process is cumulative, at least for a time. Since that is what occurs in the world of our experience, we may say that Keynes's theory seems realistic to begin with, and we may harbour the well-founded suspicion that it is correct. To restate the matter: for a time the schedule of the marginal efficiency of capital will be always one move ahead of the schedule of interest rates, because the original improvement of the former induced more investment which itself by generating more income for the community improves the outlook for the future, thus the schedule of the marginal efficiency of capital (or schedule of prospective profits) rises again and induces still more investment.

We might wonder, therefore, whether there is any limit to the amount of investment or (to put the statement dynamically) to the rate of investment. We are used to thinking of savings being invested, so that we might think that the rate of investment would surpass and leave behind the rate of savings. Indeed, Keynes himself wrote in just those terms in the *Treatise* of 1930, laying great emphasis upon the idea; and many other writers before and since have traced the effect of a disequilibrium between the rates of saving and investing.

But in *The General Theory* Keynes defined savings so that they are always necessarily equal to investment.¹ Income is either consumed or it is saved; there is nothing else which can happen to it: thus, for the community, income = consumption + saving; alternatively, saving = income - consumption. But the only source of income (for the community) is production; thus income = the value of output = consumption + invest-

¹ *The General Theory of Employment, Interest and Money* (1936), p. 63.

ment; alternatively investment = income — consumption: therefore saving = investment. This is always so, whatever period of time is considered.

Perhaps this matter may become a little plainer if put in the following way: entrepreneurs produce goods; if these goods are sold to consumers, then they constitute consumption; if they are not sold to consumers the goods constitute investment; even if the goods are unsold they must form part of investment, their makers (perhaps very unwillingly) investing in them until they are sold. Now clearly consumption must be equal in value to the expenditure of income on consumption goods: those two things are sales and purchases; they are only two aspects of the same thing. It is similar with saving and investment. Income which is not spent is saved; the output which is not consumed is investment; the income and the output are equal; thus saving and investment are two aspects of the same thing.

But it is otherwise with the saving and the investment which are *intended*. Keynes attributes the state of employment, as we have seen, to three independent proximate determinants, the schedule of the marginal efficiency of capital, the schedule of interest rates, and the propensity to consume. Of the result of the relationship between the two schedules we have already said something, and to these we shall return. The propensity to consume we have also explored conjecturally, and in so doing we have, of course, defined part of the behaviour of the propensity to save: if the propensity to consume changes between a time of depression and one of prosperity through the series $\frac{5}{6}$, $\frac{4}{5}$, $\frac{3}{4}$, $\frac{2}{3}$, then the propensity to save changes through the complementary series $\frac{1}{6}$, $\frac{1}{5}$, $\frac{1}{4}$, $\frac{1}{3}$. Since income is rising, therefore, the propensity to save, thought of as so many pounds intended for saving, will rise more rapidly.¹ For example, if the income of the community is destined to follow a course, £6 milliard, £7 milliard, £8 milliard, £9 milliard, then intended savings will be £1 milliard at first, then £1 $\frac{2}{5}$ milliard, then £2 milliard and finally £3 milliard.

But saving, so far as the income of the community is concerned, is a negative activity: it is a withdrawing of money from the stream of expenditure. If money is so withdrawn and not put into the stream of expenditure somewhere else, then the income of the community must go down accordingly. On the other hand, investment, in the usual sense of the expenditure of capital moneys on goods and services, is an active operation creating income. When we said that the income of the community was destined to follow a course £6, £7, £8, £9 milliard, that could be so only if investment, as it so happened, was intended to take place at a growing rate £1, £1 $\frac{2}{5}$, £2, £3 milliard and did actually occur at that rate. This would be an astonishing coincidence. Our coincidence supposes that entrepreneurs had a certain growing rate of investment in mind and also that the community, without yet knowing what its income was going to be, had in mind to save just

¹ $S = \sigma L$, where S = savings, σ = the propensity to save and L (as before) = the income of the community.

the same amounts as entrepreneurs intended to invest. Intended savings would prove equal to the savings actually made; intended investments would all be fulfilled at the expected costs; and savings, as intended and as realised, would be equal to intended or realised investment.

Now this, of course, is *not* what normally happens. The would-be savers are one group in the community and the entrepreneurs who decide new investment are a separate group. The two sets of decisions are independent, and if they happened to be the same it would be a marvel. Yet savings actually made are always equal to investment accomplished. How can this be so? Let us suppose that entrepreneurs intend to invest more than the community intends to save: the entrepreneurs set about their investing, and the money which they spend goes to swell the income of the community; but instead of trying to save an amount equal to the figure of investment the community spends the increased income on consumption goods; such spending generates more income and more and more until the income generated is so great that the community does save as much as is being invested. That is the way in which the necessary equality of savings and investment is preserved. If the intention to invest outgoes the propensity to save, the national income will go up enough to keep the two realisations the same.

Let us put the matter in the form of a simplified example, the simplification being that the propensity to save remains constant at $\frac{1}{4}$. Let us suppose that the income of the community is £4 milliard per annum; thus the community intends to save £1 milliard. But let us suppose that entrepreneurs, formulating among them a high schedule of the marginal efficiency of capital, intend to invest £1½ milliard, and proceed to do so. Then the income of the community will advance to £6 milliard: at that figure the would-be savers of £1 milliard find, no doubt to their collective delight and surprise, that they have saved £1½ milliard. So the national income is the balancing item which keeps savings and investment always equal.

But what happens if the community tries to save more than entrepreneurs intend to invest? Then the national income falls so that the would-be savers cannot realise their intentions. Let us continue the same example: the income of the community is now running at £6 milliard, £1½ milliard of which has arisen from investment expenditure and £4½ milliard of which has come from consumption expenditure. The community as would-be savers has an *idée fixe* to save one-quarter of its income, which it expects to work out at £1½ milliard. But entrepreneurs now change their minds about prospective profits and cut back the rate of investment say to £1¼ milliard; unemployment therefore appears: an income stream of £¼ milliard has dried up; those no longer receiving income from this source cannot now spend the money on their own needs; this forced reduction of expenditure lowers other people's incomes and so on cumulatively until the national income has fallen to £5 milliard. At that figure, saving, at $\frac{1}{4}$, will be £1¼ milliard, and exactly equal to investment at the new rate. Again the national income has played the role of balancer.

The only major unreality in this extended example is the *idée fixe*: the propensity to save would not, as we have seen, remain fixed at $\frac{1}{4}$; it would vary directly with and more than in proportion to income. Thus the swings upwards and downwards of income would not be so extreme as our example suggests.

We have made tacitly one other simplifying assumption. We have assumed that entrepreneurs realise precisely their intentions to invest. That does not always happen. Goods are coming forward from production at the rate of £6 milliard a year; entrepreneurs intend to take up £1 $\frac{1}{4}$ milliard worth as investment goods (either directly because they are productive capital goods or indirectly because they are consumption goods which the entrepreneurs' employees will buy); but the public will not spend in consumption at a greater rate than £4 $\frac{1}{2}$ milliard a year. Thus goods are remaining unsold at the rate of £ $\frac{1}{4}$ milliard a year. For the moment, then, somebody, probably their manufacturers, is very unwillingly investing £ $\frac{1}{4}$ milliard in stocks of goods which they cannot sell. This we may call involuntary investment. Savings and investment are still equal, of course, at £1 $\frac{1}{2}$ milliard. So long as output and income are running at £6 milliard, £1 $\frac{1}{2}$ milliard a year is the rate of the community's saving; simultaneously voluntary investment is proceeding at £1 $\frac{1}{4}$ milliard and, added to that, £ $\frac{1}{4}$ milliard of involuntary investment is taking place. But we may be perfectly sure that if involuntary investment is occurring, entrepreneurs will not keep a constant idea in mind about the marginal efficiency of capital. Their view will change for the worse. Simultaneously producers who have unsold goods on their hands will obviously not maintain their rate of output. For both of these reasons the income on the one hand and the output on the other will not be maintained: income will drop and the would-be savers will not be able for long to force involuntary investment upon producers, because producers will cut off the community's income rather than see unsaleable stocks grow greater. In fact, we might reduce the proposition to symbols and say that $I \equiv S$ (where I stands for investment and S for savings); that $I = I_b + I_x$ (where I_b stands for voluntary investment and I_x for involuntary investment); that $S = S_i + S_z$ (where S_i stands for savings invested and S_z for savings hoarded); then $I_b = S_i$ by definition and therefore $I_x = S_z$. That is to say, hoarding will cause involuntary investment.

This is an interesting line of enquiry. Moreover, it may be possible to show that changes in the national income correspond precisely with variations in involuntary investment. But we have already strayed beyond the Keynesian analysis into a realm too remote for examination in the present volume. A valuable purpose will have been fulfilled, however, if we have shown that something rather disquieting may lie concealed, so to speak, beneath the necessary equality of savings and investment. Furthermore, the point has been established, perhaps, that while we are correct in general in regarding investment as actively creating income, and saving as a negative process, none the less the action of the community can compel *ad interim*

the sort of investment which will have deleterious effects upon income in future and at a time by no means far distant.

Summarising very briefly then, we may say that savings and investment are always equal; but that the propensity to save and the intention to invest will not necessarily be so. If by chance they are, that would be a condition of equilibrium with no tendency for the income of the community to change. Indeed, approximately such a condition may be realised in depression; and something not very far removed from that may occur in the later part of the prosperity phase of the trade cycle; but at the time of the crisis which brings prosperity to an end the propensity to save will be far far greater than the intention to invest; and in recovery the intention to invest will be greater than the propensity to save: hence the cumulative changes in these two transition phases.

A functional relationship exists between investment and income: the multiplier.

We need to enquire more closely into the relationship between investment and income. In the preceding section we had an example in which the intention to invest differed from the propensity to save so that income increased until the two became equal. To repeat the illustrative figures: the propensity to save was $\frac{1}{4}$; the income of the community £4 milliard; investment £1½ milliard; so that income rose to £6 milliard. Thus a disparity of £½ milliard between the propensity to save and the intention to invest resulted in an increase four times as great in income. Keynes described this relationship as the investment multiplier and gave it the symbol k .¹

Then we also have to face the difficulty of time. This is always the most thorny matter to deal with in economics. Indeed, it would not be a wild exaggeration to say that all the sorrows and troubles in economics, save one, are merely matters of words and their definitions; the one exception is time: in relation to time not only the words but also the ideas become tangled up. Thus when we say that income rises *until* the propensity to save becomes equal to the intention to invest, what does *until* mean in terms of time?

Let us start again: for the year 1950 let us have a marvellous equilibrium with the propensity to save and the intention to invest equal at $\frac{1}{4}$ and £1 milliard respectively and income at £4 milliard. Thus on 31 December we can look back and say that in that year savings and investment came to £1 milliard. But in 1951 a change takes place: intended investment rises to a rate of £1½ milliard for the year. Now we *must* make *some* assumption about the time of year at which this extra investment occurs; so let us say that it happens at an even rate, the same figure every working day. If we permit no work on Saturdays, Sundays and eleven other days of holiday in the year, then there will be 250 working days in the year, and the £½ milliard of extra investment will work out at £2 million per working day.

¹ *The General Theory of Employment, Interest and Money* (1936) p. 115.

Now on 2 January 1951 (the first day of the year being a holiday), income which had been £16 million per working day apparently increases to £18 million. But what assumption are we going to make about consumption expenditure? That had averaged £12 million per working day in 1950. But if we assume that the propensity to consume remains constant at $\frac{3}{4}$, then forthwith on that day consumption expenditure must rise to £18 million and income to £24 million. The assumption of a constant propensity to consume, it may now be seen, involves a fantastic picture of the community, upon receiving £2 million extra in income from the new investment, rushing around to get three-quarters of the new money spent. But not only that: suppose the receivers of the £2 million succeed in spending £1½ million of it before nightfall; then the receivers of the £1½ million must make a speedy effort to do the same; let us suppose that they too get their £1½ million spent and so preserve their propensity to consume at $\frac{3}{4}$: we have still to reckon with those who receive the £1¼ million. Let us allow night to fall; for we are obviously confronted with an infinite series. As a result of the £2 million from new investment, consumption expenditure has increased by £1½ million + £1¼ million, or £2¾ million already; income has increased by £2 million + £1½ million + £1¼ million, or £4¾ million already; and savings have increased by £½ million + £¾ million + £1¼ million which is, of course, £2 million, for the third set of beneficiaries were caught by the onset of night saving the whole of their £1¼ million since they could not find time to spend it. Thus whereas in 1950 saving and investment were taking place at £4 million per working day, on 2 January 1951 investment and saving suddenly jumped to £6 million: they were still equal.

As to income, it is clear that the successive fractions are part of the infinite series $(\frac{3}{4})^0 + (\frac{3}{4})^1 + (\frac{3}{4})^2 + \dots$ which tends to a limiting value at $\frac{1}{1-\frac{3}{4}}$, which equals 4. So that if the new investment, or increment of investment, is £2 million, the increment of income tends towards £8 million; and if the propensity to consume really did remain unchanged on 2 January 1951, then income would advance that day to £24 million, and the infinite series would reach its infinite end before the sun set.

In defining the investment multiplier we should say, therefore, that it is the pure number by which an increment of investment must be multiplied in order to produce the amount of the increment of income caused by the increased investment; or, in symbols, $dL = k dI$, where dL is the increment of income, k the investment multiplier, and dI the increment of investment; which equation may also be written, of course, as $k = \frac{dL}{dI}$, which

is perhaps the simplest form of the definition. Again we may say that the limiting value of the investment multiplier is the inverse of the propensity to save — $k = \frac{1}{\sigma}$ or $k = \frac{1}{1-\chi}$ where σ is the propensity to save and χ the

propensity to consume); but these latter equations will give the true value of k only on the assumption that the infinite series of spendings occasioned by the new investment is actually accomplished; whereas the equation

$k = \frac{dL}{dI}$ is a definition, giving the true value of k on any assumptions.

If it revolts our common sense to imagine the infinite series of spendings being achieved on 2 January 1951, the successive beneficiaries of the increment of investment dashing about trying to spend three-quarters of their income before nightfall, then we must concede that the propensity to consume cannot remain constant. But the evidence is accepted widely that the propensity to consume does not react rapidly either upwards or downwards to changes in income: our series of fractions $\frac{5}{6}, \frac{4}{5}, \frac{3}{4}, \frac{2}{3}$, spread over a period of about four years, for the successive values of χ , the propensity to consume, is, of course, purely imaginary: there are no statistics in existence which warrant the belief that these fractions are correct. But the rate of change and even the absolute size of the successive fractions would not be wildly wrong for an industrial country of the present day. In contrast, it certainly would be unrealistic to imagine that in the space of a year χ would go through a series $\frac{5}{6}, \frac{1}{10}, \frac{7}{8}, \frac{1}{2}, \frac{1}{20}, \frac{1}{10}, \frac{7}{8}$. Thus, if we cannot endure the picture of the community making ecstastic efforts to achieve the spending of the additional income, arising from an increment of investment of £2 million on 2 January 1951, with a view to preserving unchanged their propensity to consume at $\frac{3}{4}$, then we ought to make a new assumption which is not widely different as to the community's spending habits. Thus, so as to modify the assumption only slightly, we might imagine that those who receive the increment of investment keep it in happy anticipation until the following day; then belatedly true to their chosen propensity to consume, they spend three-quarters of the enhanced income the following day. Now if all the successive sets of beneficiaries do this we shall have consumption expenditure always equal to three-quarters of the income of the working day before. This will give us the following series (in part):

	1950	1951				
Date	29 Dec.	2 Jan.	3 Jan.	4 Jan.	5 Jan.	8 Jan.
E_c	12	12	$13\frac{1}{2}$	$14\frac{5}{8}$	$15\frac{15}{32}$	$16\frac{13}{128}$
I	4	6	6	6	6	6
L	16	18	$19\frac{1}{2}$	$20\frac{5}{8}$	$21\frac{15}{32}$	$22\frac{13}{128}$
S	4	6	6	6	6	6

	1951				
Date	9 Jan.	10 Jan.	11 Jan.	12 Jan.	...
E_c	$16\frac{295}{512}$	$16\frac{1909}{2048}$	$17\frac{1631}{8192}$	$17\frac{13085}{32768}$	...
I	6	6	6	6	...
L	$22\frac{295}{512}$	$22\frac{1909}{2048}$	$23\frac{1631}{8192}$	$23\frac{13085}{32768}$	...
S	6	6	6	6	...

(Where E_c = expenditure on consumption goods; I = investment; L = income; and S = savings.)

We have pursued the series for only two working weeks, but it is clear that already consumption expenditure has reached nearly £18 million and that already income has reached nearly £24 million; by 17 January the figures will have reached approximately £17½ million for expenditure on consumption and £23¾ million for income; but neither quantity ever does reach its limit figure, of course; for this is one of these uncomfortable mathematical things: consumption expenditure gets nearer and nearer and ever so close to £18 million while income is getting closer and closer and ever so near to £24 million; but neither ever does quite get there; not even if we went on for years, decades, generations and centuries would either of them quite reach its limit.

Meanwhile, what have we been supposing about the propensity to save? We let it jump up on 2 January to $\frac{1}{3}$, and as follows:

3 January, $\frac{4}{3}$;
 4 January, $\frac{16}{33}$;
 . . .

This is evidently a series $\frac{715}{2145}, \frac{660}{2145}, \frac{624}{2145} \dots$ which is tending back towards $\frac{1}{4}$ —but which never quite gets there, of course.

But all this time income is increasing, and, as we know, the propensity to save will increase as income increases. So it becomes obvious that our assumption of a constant propensity to consume lagging by one day is unrealistic if taken too far. Furthermore, it is clear that at some moment during the night of 10–11 January expenditure on consumption reaches exactly £17 million and income exactly £23 million; let us assume that the propensity to consume now feels the effect of increased income; it was $\frac{3}{4}$ or $\frac{18}{24}$; let it decline to $\frac{17}{24}$; similarly the propensity to save was $\frac{1}{4}$ or $\frac{6}{24}$; let it rise to $\frac{6}{23}$. We have not imagined any very violent or unlikely changes. Now, the community is spending $\frac{17}{23}$ of the income of the day before and saving $\frac{6}{23}$. From the night of 10–11 January, therefore, neither income nor expenditure is under any pressure to go on rising. The effect of the increment of investment has thus worked itself out. Let us observe, therefore, the behaviour of the investment multiplier, k , on the new assumption of expenditure lagging a day behind income.

We are, of course, no longer entitled to say that $k = \frac{1}{\sigma}$; that would make k equal to $\frac{23}{6}$ which is $3\frac{5}{6}$; but our infinite series has been truncated by the change in χ and σ , wherefore k will be somewhat less than $3\frac{5}{6}$. If we make a comparison of the successive working days in January 1951 with 29

December 1950, then, using the equation $k = \frac{dL}{dI}$, we have:

$$\text{2 January } k = \frac{2}{1} = 2$$

$$3 \text{ January } k = \frac{3\frac{1}{2}}{2} = 1\frac{3}{4}$$

$$4 \text{ January } k = \frac{4\frac{5}{8}}{2} = 2\frac{5}{16}$$

$$5 \text{ January } k = \frac{5\frac{1\frac{5}{8}}{2}}{2} = 2\frac{4}{64}$$

$$8 \text{ January } k = \frac{6\frac{1\frac{3}{8}}{2}}{2} = 3\frac{1\frac{3}{8}}{2}$$

$$9 \text{ January } k = \frac{6\frac{2\frac{9}{8}}{2}}{2} = 3\frac{2\frac{9}{8}}{1024}$$

$$10 \text{ January } k = \frac{6\frac{1\frac{9}{8}}{2}}{2} = 3\frac{1\frac{9}{8}}{1024}$$

$$10-11 \text{ January } k = \frac{7}{2} = 3\frac{1}{2}$$

and on all subsequent days in 1951, so long as the two propensities remain constant, k will continue to be $3\frac{1}{2}$.

Thus, on the assumption of a working day's lag of expenditure behind income, it appears that the investment multiplier goes through a transitional phase; but, on the basis of further assumptions which are not altogether improbable, that the transitional phase lasts only a few days; and that the final value which the investment multiplier reaches is not far short of $\frac{1}{1-\chi}$: it is in fact $3\frac{1}{2}$ against $3\frac{5}{6}$.

At least, dealing with the matter in this way, we have got rid of the fantastic implications of a constant propensity to consume, and we have cut short a tedious and elusive proposition in infinite time. Of course, the figures given make no claim whatever to accuracy; they are all given for purposes of illustration, and are based on nothing better than conjecture. Moreover, our example is one in which the rate of investment suddenly added no less than two cubits to its stature in rising by 50 per cent: an increase of this size might well cause k to diverge from $\frac{1}{\sigma}$ by more than our specimen figures suggest. Our initial assumption, however, that $\frac{1}{2}$ milliard of new investment would be spread evenly over 250 working days at £2 million per day offers no difficulty: the same ideas which we have developed could be pursued on the basis of any other assumption about the timing of the extra $\frac{1}{2}$ milliard.

What emerges then from our simple investigation of the relationship between investment and income? First, if an increment of investment occurs, savings will go up to a corresponding amount at once, or on the same day or within any other period of time which we like to name. That

is no discovery, of course: they are defined so as to be equal always; yet perhaps this is worth restating since there are still current on this point some wrong notions which come to light at times in the most unexpected places. Furthermore, an increment of investment will cause the income of the community to rise by some multiple of that increment. The multiple seems likely to be somewhat less than the inverse of the propensity to save, but not a lot less so soon as a brief transitional period is over.

Precise knowledge of the actual behaviour of the investment multiplier, k , can be expected only after econometrical work has continued much further than it has gone at present. In the meanwhile, illustration of the theory may rest on gay and carefree conjectures; it is hoped, however, that the conjectures may have served to show the functional nature of k , and to suggest that increased investment in times of unemployment may be of much greater moment to the income of the community than the amount of investment itself might lead us to suppose.

Whilst interest rates are conventional and relatively stable, the schedule of the marginal efficiency of capital is liable to violent changes.

The schedule of interest rates is a very conventional matter. Central Banks, it is true, publish a 'Bank Rate' or 'rediscount rate' at which they are prepared to purchase assets of a specified type from the members of the Money Market, and to that extent they may directly prevent the rates in question rising above a certain figure. But these are all short-term rates, those, that is, payable on bills of exchange and on other assets which are due for repayment within three months. Thus the rates on assets whose repayment dates are years ahead are influenced only indirectly, and by devices other than Bank Rate.

It is almost certainly true that before the great depression the great bulk of investors expected long-term interest rates, with a small margin included for risk, to be normally about $4\frac{1}{2}$ per cent to 6 per cent. The establishment of these rates does not result from well-informed men in the City making the most sensible estimates which they can of what the rates ought to be. If that were the process interest rates would not be so stable, but would be much more nearly in accordance with the investment prospects of the moment. What happens in fact is that the well-informed and the ignorant equally try to guess which way the markets in capital securities are going. But the markets move as a result of the aggregate expectations of investors. Thus everyone is trying to guess what everyone else is going to do. If people did not do that, they would lose money. It might be sensible to conclude at a given moment that Government bonds were too high: it would seem that the prudent speculator would then become a bear, selling what he did not possess in order to offset the sale by a later purchase at a lower price. But if people in general do not take the sensible view, it would be folly for the speculator to act upon it. His stratagem must be to estimate the future expectations of the public and to act just before the public acts.

Now, in fact, the public, and even the professional dealers in securities, are very ignorant of the future. As the text of *The General Theory* puts the matter:

It would be foolish, in forming our expectations, to attach great weight to matters which are very uncertain. It is reasonable, therefore, to be guided to a considerable degree by the facts about which we feel somewhat confident, even though they may be less decisively relevant to the issue than other facts about which our knowledge is vague and scanty. For this reason the facts of the existing situation enter, in a sense disproportionately, into the formation of our long-term expectations; our usual practice being to take the existing situation and to project it into the future, modified only to the extent that we have more or less definite reasons for expecting a change.

The state of long-term expectation, upon which our decisions are based, does not solely depend, therefore, on the most probable forecast we can make. It also depends on the *confidence* with which we can make this forecast—on how highly we rate the likelihood of our best forecast turning out quite wrong. If we expect large changes but are very uncertain as to what precise form these changes will take, then our confidence will be weak.¹

But prospective profits, or the schedule of the marginal efficiency of capital, do not depend upon the public. Here the professional business man is making estimates in the field of his own expertise. He is not so likely to be unrealistic. Thus as conditions change there will be movements, in general corresponding with reasonable accuracy to reality, in prospective profits. Usually the changes in prospective profits derive from something substantial; but let us observe the following case closely. The inducement which business men experience to make new investment depends upon expected profits and the cost of the investment. But on that investment depends the income of the community, as we have shown. Thus if for no good reason business men check investment, their fears will be realised, for the lessened income will induce them to believe that investments, had they been made, would have brought losses. Now that belief is not really sound when we are dealing with aggregate investment; yet within a certain range whatever the business world dreams will come true. If there is confidence and new investment is increased, the confidence will be justified; if there is pessimism and investment is checked, that pessimism will produce its own justification.

So there is a reason in the relationship of the schedule of interest rates and the schedule of the marginal efficiency of capital for those fluctuations of investment which are causative, at least proximately causative, of the trade cycle. This is not the whole story indeed, but one troublesome feature not easily to be understood in the trade cycle is explained by the relative immobility of interest rates compared with prospective profits. We know that prosperity continues in each cycle for a time, finally becoming rather hectic and unreal with over-optimistic speculation chasing prices to unwarrantable levels. Then comes the crash. Why this sudden crash?

¹ p. 148.

Why not a gentle falling off of prices and employment? The reason is that confidence, to use the word quoted from *The General Theory*, is suddenly lost: the schedule of the marginal efficiency of capital collapses overnight. This brings new investment to a complete stop for the moment, and the loss of income entailed thereby must necessitate lower prices in the future. Hence the scramble to sell off stocks of goods at sacrifice prices; hence also the attempt to limit losses by cutting down production, which means, of course, discharging men from employment.

This raises a point important both from the theoretical and from the practical point of view. When the schedule of the marginal efficiency of capital collapses, would it not be possible so to lower interest rates that the inducement to invest would be restored? Now it is true that later on a low level of interest rates will be necessary for recovery to come about; but at the moment of crisis no practicable lowering of interest rates could save the inducement to invest. Probably prospective profits are not profits at all but losses and so the schedule of interest rates would have to fall to negative figures greater than these. Lenders would have to offer minus rates of interest: £100 now for £95 paid back in a year's time. Now, however rational it might be for lenders to do this in order that we might all avoid the unpleasant phases of the trade cycle, we may take it as certain that lenders will not act in this way. Banks may incur bad debts of serious size in depressions; they might avoid these by lending for less than nothing; but who would undertake to persuade the directors of a bank to institute a policy of giving money away?

So the conventional nature of interest rates must be taken as given, and policy will have to find some other method of opposing the forces of cyclical instability.

Liquidity-preference is an important determinant of interest rates.

We began by describing Keynes's three independent variables, the propensity to consume, the schedule of the marginal efficiency of capital and the schedule of interest rates as *proximate* determinants of the volumes of employment and output. Now let us look into the matter a little further and observe some of the forces which lie behind these three. The quantity of money and the demand for it are important among such remoter forces.

We are used to thinking of the demand for money as one of the determinants of its value, the quantity of it being the other. But Keynes did not speak of the demand for money, because, as he showed, that expression is misleading.

For the demand for money is not something unique; it is one species of a numerous genus. The genus is the demand for *liquidity*; the demand for money is only the extreme case of this sort of demand. He pointed out that interest is not, as has usually been stated by earlier writers, the reward for (or price of) *waiting*; it is not the remuneration necessary to call forth saving; for a man can save currency, hoarding it, for example, in the

traditional stocking, and obtain thereby nothing in the way of interest. Interest is really the reward for surrendering liquidity, for dispensing with the convenience of holding ready money immediately available for any expenditure, either on consumption or on capital goods. Interest is the price (if another form of words is required) for immobilising our savings, and the longer the time for which they are immobilised, the higher in general the rate of interest.

Now money is the most liquid or mobile of all assets; but we must not divide assets into two classes, mobile and immobile, as those people are in danger of doing who talk about the demand for money; for there are degrees of illiquidity: we shall generally require a larger rate of interest per annum for locking up our resources for ten years than for locking them up for one. Thus liquidity-preference is the feeling in the minds of capitalists which makes them opt at one time for longer-dated securities with the higher yields which these usually give, at another time for the lower yields and earlier repayment dates of 'shorts,' and at yet another time for money itself, which will yield nothing but is completely liquid. Sometimes confidence will prevail and capitalists will feel bullish towards illiquidity; this is likely to affect favourably the relationship between the schedule of the marginal efficiency of capital and the schedule of interest rates, and thus to tend towards a higher rate of investment; for the more important projects in the minds of enterprisers, going to make up their schedule of the marginal efficiency of capital, are somewhat long-dated; thus it is the longer interest rates which are the more important. At other times capitalists will feel bearish towards longer-dated investments, and thus an opposite depressing impulse may attack the rate of investment. At still other times capitalists may panic, perhaps with good reason, and seek to hold money at all costs: evidently in those circumstances the whole schedule of interest rates will advance violently.

Thus we reach the conclusion that liquidity-preference may be a powerful force determining interest rates, and this is its importance. For the capitalists whose liquidity-preference varies are the same persons whose funds are on offer for borrowing according to the schedule of interest rates. In particular, in a time of crisis, liquidity-preference will become insatiable, and that is partly why disastrous recession ensues.

Yet although liquidity-preference may play the role of the villain in a crisis, it is not in the ordinary way the first nor principal villain. It is the collapse of the marginal efficiency of capital which brings prosperity to an end; only after this collapse does liquidity-preference strike its blow at the body economic. As prices fall steeply, if the volume of money remains about the same, then money will be relatively more plentiful; but all this relative excess is likely, almost certain in our experience, to be absorbed by the urgent desires for large liquid balances; and, indeed, the relative excess of money compared with the value of transactions is commonly insufficient to satisfy the frightened desire for money: liquidity-preference wants all that and a lot more. Only when prices have fallen and fallen and

fallen, down to the level of the slump, will liquidity-preference at length be satisfied.

The volume of money influences both interest rates and liquidity-preference; and may act also upon the schedule of the marginal efficiency of capital and upon the propensity to consume.

Finally, we have to enquire what other major influence regulates rates of interest. We have said above that interest rates are highly conventional factors, and this has been more particularly true of long periods of time. Changes in the schedule of prospective profits and in liquidity-preference are more particularly relevant to the phases of the trade cycle. But there is one factor which may operate upon interest rates for short, intermediate or long periods; this factor is the quantity of money.

It is not clear, at first, perhaps, that this is a channel through which the quantity of money operates, and, indeed, it is not the only channel. But if we are too obsessed with the ideas of the Quantity Theory, we might argue that an increase in the quantity of money would depress its value, causing brisker trade and higher interest rates. But that would be a false approach: it is by lowering interest rates that an increased volume of money leads to better trade; to the extent that interest rates rise, the effects of the increased volume of money are offset.

This proposition seems more natural if we turn our thoughts away from traditional monetary theory back to the very simple generalisations of supply and demand enunciated as the theory of value. If we do this, we shall say that, as the supply of money increases, the terms on which it is loaned to borrowers must decline—other things remaining the same; this would be true also of houses or of anything else customarily hired; or we can put the matter more precisely and say that, if liquidity-preference remains unchanged, competition will take place among those who want to get rid of the additional money created, let us suppose, by the Central Bank. The way to get rid of money, in this sense, is to find someone to borrow it, and the way to effect this is to lower the cost of borrowing. This is the manner in which an increased volume of money operates. But it is clear that, if interest rates were low already and business stagnant, an increased quantity of money might be offset by a change of liquidity-preference; indeed, the deflationary effects of the latter change might be upon a scale more than enough to offset the increased volume of money. If such appeared to be the state of affairs, it would be unfortunate if the monetary authority concluded that the policy of increasing the volume of money was abortive—although it does not follow, of course, that an enhanced rate of increase of the quantity of money is necessarily the policy wisest in any particular circumstances.

The Quantity Theory of money was inadequate because it concentrated attention upon the effects of the volume of money upon the propensity to consume: an increase of money will tend to produce more spending, but the Quantity Theory glossed over the important difficulties by picturing

the propensity to consume as an amount, that is, by comparing expenditures of different periods as sums of money instead of comparing them as the proportions spent of the incomes of the different periods. If income increases by reason of the Government paying for higher expenses by printing inconvertible notes (an increase in the volume of money), expenditure will naturally be higher. We may say that this is a second channel through which the volume of money affects the intensity of economic activity, but we must not forget that, whilst expenditure may be larger because of an increase in the volume of money, the proportion of income finding its way into expenditure for consumption will tend to decrease.

It is true, also, that increasing the volume of money may have an effect through a third channel. The feeling might be struggling to gain ground, for instance, that a slump had 'touched bottom'; the announcement of an expansive monetary policy might then have the effect of changing swiftly the schedule of the marginal efficiency of capital; so that, with rates of interest unchanged or advancing less than proportionately, the volume of employment and later of output would begin to increase cumulatively—for a time.

The announcement of a sudden change to an expansive policy might even be so closely identified in the public mind with the prospect of better trade, that the propensity to consume would increase in anticipation—and that anticipation would not be disappointed.

But revival from depression comes, as a rule, only slowly and not suddenly; and it is important to perceive the reasons why an interval of slump conditions occurs so regularly between the collapse of a boom and the beginning of recovery. Why is there this period, frequently three or four years in length, which we have described as the half-dead equilibrium of the slump?

We might suppose that, when liquidity-preference was at length satisfied with the amount of money released by the transactions demand because of lower prices, then recovery could begin at once. But this is not so. It is not so because the marginal efficiency of capital "determined, as it is, by the uncontrollable and disobedient psychology of the business world"¹ cannot be revived. Keynes continued:

It is the return of confidence, to speak in ordinary language, which is so insusceptible to control in an economy of individualistic capitalism. This is the aspect of the slump which bankers and business men have been right in emphasising, and which the economists who have put their faith in a "purely monetary" remedy have underestimated.

This brings me to my point. The explanation of the *time-element* in the trade cycle, of the fact that an interval of time of a particular order of magnitude must usually elapse before recovery begins, is to be sought in the influences which govern the recovery of the marginal efficiency of capital. There are reasons, given firstly by the length of life of durable assets in relation to the normal rate of growth in a given epoch, and secondly by the carrying-costs of

¹ *The General Theory*, p. 317.

surplus stocks, why the duration of the downward movement should have an order of magnitude which is not fortuitous, which does not fluctuate between, say, one year this time and ten years next time, but which shows some regularity of habit between, let us say, three and five years.¹

Thus the slump will go on until enough essential capital equipment has worn out to create a demand for new investment which the depressed conditions cannot prevent. And it will go on too until there have been used up those excess stocks whose high carrying costs are a factor governing the extent to which prices fall. These then are the intractable factors causing the slump to go on and on; and nothing that we can do by way of lowering interest rates will make very much difference, though a lowering of interest rates if they are high will be a step in the right direction.

Thus, briefly to summarise the argument of *The General Theory*, we have observed that the prosperity of the community depends proximately on three determinants which are independent variables: the propensity to consume, the schedule of the marginal efficiency of capital and the schedule of interest rates. Increases in the propensity to consume will have always a stimulating effect upon the economy; conversely the propensity to save, which is, of course, the complement of the propensity to consume, will, if it increases, have a depressing effect upon economic activity. Similarly the two schedules, as they are raised, will have opposite effects upon output and employment; a greater marginal efficiency of capital tending towards a higher, and an enhanced schedule of interest rates towards a lower, economic intensity. Thus it is the relationship of these two schedules to each other which will produce a net effect.

But our three variables are only proximate causes; through these operate in particular liquidity-preference and the quantity of money; an increase in the former having a depressing effect, and an increase in the latter having a stimulating result.

Indeed, we might list the variables as 'factors of increase' and 'factors of decrease,' in the manner of the Board of Governors of the Federal Reserve System of the United States when it considers Member Bank reserve balances.² We shall be imagining all of the factors to rise in amount; if any falls the effect will, of course, be opposite. Thus the factors of increase will be those making for greater economic activity, and the factors of decrease will be those making for recession.

Factors of increase:	Factors of decrease:
The propensity to consume.	The propensity to save.
The schedule of the marginal efficiency of capital.	The schedule of interest rates.
The volume of money.	Liquidity-preference.

We have observed that the crisis is explained by the collapse of the schedule of the marginal efficiency of capital. And we have seen too that

¹ *The General Theory*, p. 317.

² See *Annual Reports of the Board of Governors of the Federal Reserve System*.

the long duration of the depression is explained by the existence of durable goods, some being productive capital goods and others being consumption goods at all stages of production and distribution.

The Keynesian analysis accounts for all the features of the trade cycle.

Thus we may use the Keynesian analysis to summarise the whole trade cycle, and to lay bare the causative elements operating. Let us begin with the half-dead equilibrium of the slump. The schedule of interest rates is at its minimum; stocks of commodities will have been reduced, for consumption will have been taking place more rapidly than output; the cost of productive capital goods, in common with other costs, is low; and productive capital goods will have been wearing out more rapidly than they were being replaced. All of these are features of the half-dead equilibrium of the slump, and each contributes to produce at last a rise in the schedule of the marginal efficiency of capital. But the schedule of interest rates does not rise, probably not at all to start with, and very much less when it does begin to move.

Now, the two schedules are out of balance, and that is the cardinal feature of recovery. Investment therefore increases, but the propensity to save remains for the moment as it was. Thus the income of the community increases, and does so by much more than the increase in the rate of investment, for here the effect of k , the investment multiplier, comes into play. With the feeling that better times are approaching the propensity to consume may even increase; if so, that will constitute another cumulative process in addition to that already under way. For the unbalance between the schedule of the marginal efficiency of capital and the schedule of interest rates is itself a cumulative process, the rise of income causing the former schedule to advance more rapidly, thus widening the gap between the two—for a time. Thus the economy passes into prosperity.

The cumulative process goes on and usually ends somewhere near a condition of full employment¹ and maximum output. If prices continue to go up after this, that is, of course, inflationary; but it is not inevitable that such inflation occur. The schedule of the marginal efficiency of capital will react somewhat in prosperity; partly as a result of higher prices and partly as a result of a falling propensity to consume. At the same time the schedule of interest rates will commonly harden slightly; so that the two schedules may come approximately into equilibrium, first the one slightly higher and then the other. This is the relatively stable period in the later part of the phase of prosperity. The higher income of the community will have caused the attempted rate of saving to be approximately equal to the rate of investment. But as prosperity continues, so the propensity to consume will decline, and herein lie the seeds of disaster.

For as the propensity to consume declines, the income of the community now being approximately stable, so the effective demand for consumption

¹ This may usefully be thought of as the condition in which 95 or 96 per cent of the labour force is employed.

goods will decline; moreover, by the well-known process of magnified demand, the demand for productive capital goods will be more adversely affected still. Thus the marginal efficiency of capital is assailed frontally. But it is also attacked, so to speak, in the rear, for as prosperity has been continuing the price level of productive capital goods will have been increasing. Thus, attacked in front and in rear, the schedule of the marginal efficiency of capital collapses. This is the crisis. At once liquidity-preference becomes insatiable, chasing interest rates to grotesquely high levels. Thus an enormous disparity develops between the two schedules, the marginal efficiency of capital having collapsed almost to nothing and rates of interest being at their maximum. This is the essential nature, as it is the prime cause, of the violent, cumulative recession characteristic of industrialised countries.

In the recession investment, or more exactly voluntary investment, will practically cease. The propensity to save will also contract with the catastrophic fall in income. But it is characteristic of recession that people will try, through fear of insecurity, to save what they can; and this fear only makes the recession the worse. At length, for the community as a whole, saving may actually become negative, thus enabling the stock of commodities to be reduced, a process of disinvestment. But by this time the economy will be deeply embedded in the slough of depression.

For a time depression will get worse and worse with the schedule of the marginal efficiency of capital ever below the schedule of interest rates; the propensity to save still above the intention to invest and income consequently falling further. But the point is reached eventually beyond which income cannot fall. The Government steps in to relieve intolerable privation and unemployment with relief schemes and public works. Meanwhile, interest rates, in face of the lack of takers, will at length have fallen as far as they can, and the half-dead equilibrium of the slump supervenes. The schedule of the marginal efficiency of capital will have recovered by a small degree to reach an approximate balance with the schedule of interest rates at its minimum; investment and saving will be very low, perhaps negative; and the income of the community¹ will be at the minimum; unwanted stocks of goods will be decreasing; and thus slowly and painfully the stage is being cleared for recovery once more to make its appearance.

¹ All through this long chapter the expression, the community, has recurred. "The community" really means the whole world; any society wholly cut off from the outside could be taken, however, as the Keynesian community; and the propositions relating to the community in the trade cycle would be true of such a society. But what is not legitimate is to take a single country and to treat that as the community, thus expecting Keynes's theories to apply precisely to such a single country: they are not in that manner applicable; certain rather grave allowances have to be made. See Sir Hubert Henderson, "The Function of Exchange Rates," in *Oxford Economic Papers*, vol. I, No. 1, January 1949.

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CHAPTER X

MONETARY STANDARDS (WITH SOME NOTES FROM THEIR HISTORY) AND THE FOREIGN EXCHANGES

The main objectives of the Gold Standard are two: internal and external stability; arbitrage in the foreign exchange market assuring the latter.

THE Gold Standard is an arrangement whereby the chief piece of money of a currency is exchangeable with a fixed quantity of gold of a specified quality. We say the chief piece of money because laws which in the past enacted the adoption of the Gold Standard used to speak of "the pound sterling," "the franc," "the dollar," or of whatever unit it might be, as equal in a manner defined to so many grains of gold. If one unit of any currency were thus defined in gold, so also were all the others since the exchange ratios between all units of a currency (pounds, shillings, pence, etc.) would be already fixed.

In the past, pure gold being soft, gold coins contained a small proportion of alloy (of negligible value), the proportions differing slightly from one country to another. This amalgam was called their 'standard' gold by the different states. Thus, for example, the British sovereign was defined by the Act of 1870 as 123·27447 grains of standard gold, our standard being $1\frac{1}{2}$ fine. This was equivalent to £3-17-10½ per Troy ounce of standard gold or just under 85s. per ounce of pure gold. At present, as we shall see in Chapter XVIII, Gold Standard arrangements, which are not, indeed, operative, define currency units in pure gold and not in standard golds.

It used to be the custom, an almost universal one, for the State to impose upon the Central Bank the duty of exchanging currency for gold and gold for currency, at the exchange ratio specified in its Gold Standard law, upon the request of any member of the public.

Sometimes there was a slight margin between the Central Bank's buying and selling prices for gold. For example, before World War I the Bank of England bought standard gold at the price of £3-17-9 per ounce and sold it at £3-17-10½; in those days, gold coins circulated and the "turn" of $1\frac{1}{2}d.$ per ounce was supposed to represent the interest obtainable by changing gold into money at once instead of taking it to the Mint, which had to coin it for the owner without charge, but took some time to do it.

In the past, if the margin between the Central Bank's buying and selling prices had been considerable, of the order, say, of 5 per cent or 10 per cent, it would certainly have been felt that the country in question was not *properly* on the Gold Standard, and no doubt the priests of financial orthodoxy in foreign countries would have regarded the rulers of that land

as being, either through ignorance or vice, grossly deficient in their practice of the faith. Nowadays we should not be so sure.

“The objects of the Gold Standard are to maintain the value of the currency in terms of foreign currencies and to maintain it in terms of purchasing power within the country.”

The manner in which the value of one currency is maintained in exchange for other currencies may be illustrated as follows. The pound sterling is now defined as 2·48828 grams of fine gold, whilst the Norwegian krone is equal to 0·124414; so the par of exchange is $2·48828 \div 0·124414$ kroner = £1, which is 20 kroner to the pound. Now let us suppose that none of the present restrictions on exchange dealing exists: British people, let us say, can buy all the kroner they want; conversely Norwegians can obtain any amount of sterling in exchange for kroner; and both Central Banks, the Bank of England and the Bank of Norway, will buy or sell unlimited amounts of gold at the fixed prices. Then let us consider the case in which a quite exceptional and remarkable number of British families decide to spend their holidays in Norway and that they want their money in krone notes in London before they go. Now such a temporary movement of persons and spending power will create an extraordinary demand for kroner. What will happen? What would happen to anything else if there were an extraordinary demand for it? Its price, of course, would go up. And in the case of kroner, let us say that instead of getting 20 for £1, the later holidaymakers found that they could get only 19.

Now if a rate of 19 to the pound were quoted, there would come into the market a dealer whose proper name is arbitrageur. He exchanges a large sum of sterling, let us say £100,000, at the Bank of England for gold; thus he will get 248,828 grams. This gold he ships to Oslo and exchanges it with the Bank of Norway for Kr. 2,000,000. The kroner he brings back to London and if the rate of 19 to the pound continues, this sum will realise for him more than £105,263; so within a few days the arbitrageur will have made more than 5 per cent on his money with practically no risk at all. Of course, his operation will have involved certain expenses: shipping, handling, insurance and (a very small affair when England and Norway are concerned) the loss of interest which might have been earned by the £100,000 in another employment. But all these charges amount in actual cases to only about $\frac{1}{2}$ per cent of the value of the gold.

Now, in our example the arbitrageur's net profit of over $4\frac{1}{2}$ per cent is obviously too high. Suppose the whole operation took a week; that would be a net profit at the rate of more than 234 per cent per annum. Long before profits at that rate have become possible some arbitrageur will have gone into the market with the effect of providing a greater supply of kroner to meet the extraordinary demand for them. The existence of the Gold Standard means, in fact, that the exchange rate cannot deviate from the par of exchange, 20 kroner to the pound, by significantly more than $\frac{1}{2}$ per cent. Thus if the rate goes beyond 19·9, which in London is called gold export point, or, in the other direction, beyond 20·1 kroner to

the pound (gold import point), gold will move one way or the other. Thus so long as the Gold Standard exists without restrictions, the krone cannot move appreciably outside these gold points: the stability of the krone-pound rate is assured within these narrow limits. And the same stability will exist, of course, among all Gold Standard currencies. Indeed, the knowledge that gold *could* be moved to bring two currencies back within the gold points is usually enough to prevent frequent movements, and thus to ensure that the value of any Gold Standard currency will be maintained in exchange for other Gold Standard currencies.

In the second place, the *internal* value of the currency is preserved by allowing the public freely to obtain gold in exchange for currency (of equal value) from the Central Bank. Liberty to do this ensures that the value of the notes shall always be the same as the amount of gold which they are supposed to represent—so long as the Gold Standard remains in force. This argument assumes, of course, that the purchasing power of gold remains constant; at this stage we will say merely that, although the bases for making this assumption are not really very sound, yet a belief in the stability of gold is widespread, even to-day, and it is this belief which is vital to the smooth working of the system; the actuality does not matter very greatly so long as men in general preserve their simple faith in gold.

Four forms of the Gold Standard may be distinguished.

Of the four forms which the Gold Standard has taken, the first three are well known, but the last was an arrangement which lasted for only a very few years immediately before World War II. None the less this fourth type is worth consideration also.

We shall call the four forms respectively:

- (i) The Gold Circulation Standard;
- (ii) The Gold Bullion Standard;
- (iii) The Gold Exchange Standard;
- and (iv) The Gold Reserve Standard.

(i) The Gold Circulation Standard: with this form of the standard, gold coins are actually in circulation. It is the essence of the matter that the chief gold coin should be full-bodied; it was felt that such an arrangement gave solid and tangible security in the most reassuring manner possible. There was, as well, the added convenience that the traveller could proceed abroad, bearing his own currency with him, in the confident expectation that any person or establishment of consequence would accept it in payment without question. This was the monetary system which the world regarded as right and proper during the latter part of the last century and the early years of the present one; when World War I broke out, it had been adopted by all nations of importance except China; since that War, this form of the standard has not been resumed.

Sovereigns could be exported, as well as gold bars, and it was quite

lawful to melt them down; conversely, gold ornaments could be taken to the Bank and exchanged for money of the value indicated by their weight and fineness.

The Gold Circulation Standard is very ancient: silver, indeed, has served as standard throughout a greater period of history, but even so, the passing of gold from hand to hand as money is an immemorial custom. We may describe the Gold Circulation Standard, therefore, as a primitive monetary criterion: it is the traditional system. Later forms of the Gold Standard have inherited the halo of sanctity attaching to this long-established method of payment.

(ii) The Gold Bullion Standard: this is the type of standard typical of the stabilised interlude after World War I. It is different from the first type in that gold coins do not exist; furthermore, the single monetary unit (the £1 note, for example) cannot by itself be turned into gold by presenting it over the counter of the Central Bank. Bar gold can be obtained, however, by those willing to surrender the large sum in notes which is equivalent in value to one bar. In the case of Great Britain, this sum was £1,557-10-0. The idea behind this change was that the gold would be more useful when concentrated in the hands of the Central Bank. It is true that, should the feeling spread that the convertibility of the currency into gold was in danger, the public was no longer able to safeguard small savings by changing them into gold coins, but, by the time that the return to the Gold Standard was made, the public of most countries had become quite accustomed to the use of notes instead of gold coin, and seemed, indeed, to prefer the former.

The ability to obtain gold, and the liberty to melt or export it: these were the things then considered important: countries strove, after World War I, to re-establish these arrangements, and succeeded—for a time.

(iii) The Gold Exchange Standard: this form of the standard is usually a half-way stage between inconvertibility and one or other of the foregoing types. As the name suggests, the currency of a country possessing this sort of standard is convertible not directly into gold, but into the currency of some other country which does possess a Gold Standard. Thus, if France maintained, let us say, type (ii) Gold Standard, and the pound sterling were, at the time, inconvertible into anything else at the Central Bank, the Government might enact that the Bank of England should always give French francs to those who required them in exchange for sterling at the rate (say) of 1,000 francs to £1; in this way, it would be possible to manage with less gold than would be required if every country had its separate stock; but usually the adoption of the Gold Exchange Standard is carried out in the hope that the “full” Gold Standard (generally meaning the Gold Bullion Standard) will become possible later. Yet if the trade of a small country were carried on largely with a great neighbour, it might well be more important for the former to have its currency fixed in terms of the currency of the great neighbour than to have it fixed in terms of gold; Denmark and England constitute an example of such a case.

(iv) The Gold Reserve Standard: between September 1936 and World War II there existed an arrangement between Belgium, France, Great Britain, Holland, Switzerland and the U.S.A. whereby gold movements could take place between one country and another, although the Gold Standard in any of the foregoing senses was not in existence. The movements of monetary gold (that is, gold not belonging to commercial dealers) took place not between Central Banks themselves but between Exchange Equalisation Funds which were departments of the Treasuries of their respective countries, working in close co-operation with their Central Banks. Each Fund (or Account) began with a large supply of its own currency which it used to acquire foreign exchange and gold up to a certain proportion of its assets. This enabled the Fund in question to intervene either way in its foreign exchange market. If dollars were in demand in London, the British Fund would supply them rather than let the dollar rise in relation to the pound. If French francs were scarce in Paris, the French Fund would release the amount required and would take in exchange the currencies on offer, so holding the rates.

Now, evidently this system would go on only so long as no Fund ran out of any of the six currencies. It was this eventuality for which the agreement of 1936 made provision.¹ If, for example, several other Funds found their stocks of sterling becoming excessive, they could apply to the British Fund for gold in exchange. That gold could then be kept by the recipients or could be turned into any currency of which they were short. But the British Fund could not let itself be denuded of gold altogether in this way. If the requests for gold in place of sterling were persistent that could only mean that sterling was overvalued. In that event the Funds would cease by agreement to buy all sterling on offer in the various centres, with the result that it would fall to a lower level. They were able to make the transition somewhat orderly by sometimes buying and sometimes selling sterling; and when that currency had reached new exchange rates upon which they had agreed, then they would come in again to control the market by buying and selling unlimited amounts as the markets demanded at the new levels.

By the means described the maximum of exchange stability was achieved without severe changes of interest rates or any other action which would affect profoundly in a depressing sense the internal economies of the countries.

It was not possible by means of the Gold Reserve Standard to keep the rates within a range of 1 per cent, as with the earlier types of Gold Standard, but considerable fluctuations of 5 per cent, 10 per cent or 20 per cent within a few days were prevented.

While these Gold Reserve Standard devices were operated, the price of gold in the different currencies was not fixed precisely; which added a

¹ The agreement is known as the Tripartite Monetary Agreement of September 1936: the original signatories were France, Great Britain and the U.S.A.; Belgium, Holland and Switzerland became adherents in November 1936.

further element of flexibility to a system designed to absorb shocks which would have been fatal to a rigid Gold Standard.

The Funds operated secretly. The markets did not know what the Accounts were buying nor in what forms their resources might be at any time. Nor was the policy of the Controls (as they were also called) made public. There can be little doubt that this concealment contributed to the efficiency of the system; though there were those who disliked the air of mystery, some of them for substantial reasons. So far as is known, the system worked exceedingly well. But even this more elastic version of the Gold Standard could not prevail against the exigencies of war. Direct control of all exchange dealing had to be introduced early in World War II; and a multitude of regulations still persisted in 1950.

Bimetallism is theoretically always possible.

In discussions since World War I, much attention has been given to gold as a monetary standard, and very little to silver; only in the United States, where silver producers can exert a political influence disproportionate to their importance, is the desire 'to do something for silver' a live issue; even China, which held to a silver standard (of necessity) long after other countries had abandoned it, revoked it in 1934—as a result of United States purchases of silver! These were conducted by the Government, and silver-producing interests in the United States benefited by the enhanced price for their product—a fact which cynical Republicans describe frankly as Democratic vote-catching. Sometimes the wholly fallacious argument used to be heard that a rise in the price of silver would benefit China by raising the purchasing power of her currency: the purchasing power of her currency did go up, but not so the value of her exports which continued to fetch world prices; thus prices of exports and prices in general in terms of Chinese currency fell, and this deflationary process became so severe that China had to abandon the silver standard.

Since 1934 the exigencies of war, foreign occupation and civil war have led the Chinese Government to issue masses of paper money which, having led to outrageous increases in prices, constitute a very severe problem preventing the recovery of the country. It is doubtful whether China would have been able, apart from the unfortunate action of the United States, to maintain the Silver Standard against the pressure of her misfortunes; yet at least her abandonment of her standard might have been postponed until later.

Although there is now no country adhering to the Silver Standard, it has been silver rather than gold which has been the traditional standard throughout the greater part of monetary history. The Silver Standard of old was similar in detail to the first type of Gold Standard described: it was a Silver Circulation Standard.

Whilst there would be no considerable support to-day for the extensive adoption of a monometallic Silver Standard, there are still advocates of bimetallism—the simultaneous maintenance of gold and silver as mone-

tary standards. Bimetallism was, in fact, the system still in force over an important commercial area in 1873; it was abandoned then in a manner to be described later in this chapter. Britain happened, largely by chance, to possess a Gold Standard; the United States had no standard, but was likely to revert to gold as soon as possible; Germany, on the threshold of commercial greatness, influenced by the advocates of gold monometallism at an international monetary conference held in 1867, therefore made the decision, while reorganising her monetary mechanism, to copy England's system. Germany's action helped to make the position of the bimetallic countries untenable, and adoption of the Gold Standard resulted in all leading countries within a few years.

The Ancient Greeks used both gold and silver in their monetary system, but whilst the unit of account was specified in terms of silver, it was not so specified in terms of gold; their standard was thus a monometallic silver one, with gold playing a subsidiary role for large transactions.

But the great convenience of having the ratio between gold and silver fixed tempted monetary authorities in later centuries to take that step—and great were the resulting confusion and difficulty. The ratio between gold and silver means, of course, the terms of exchange between the two metals. Thus if the ratio between standard silver ($\frac{900}{1000}$ fine) and standard gold ($\frac{11}{12}$ fine) be fixed at 20 to 1, while the price of standard gold is (since September 1949) 229s. 2d., the price of standard silver would have to be 11s. 5½d. per ounce. Early in 1950 the price was 5s. 4d. per fine ounce, corresponding with 4s. 11·2d. per standard ounce. If silver were to be fixed at that price, that would give a ratio of just under 46½ to 1.

Yet if the right ratio is chosen, it is quite feasible to have both metals as coequal standards: bimetallism is theoretically always possible. For the values of the precious metals clearly depend, like the values of other commodities, upon their supply and demand. If both metals are equally serviceable as money, either being accepted by the Mint for coinage, for instance, there is no great likelihood of one being preferred to the other as a means of payment; a gradual increase in the scale of payments may increase the use of gold in circulation, but the growth of more highly developed means of payment is likely to effect an economy in the circulating use of gold more than sufficient to offset such a tendency. If the metals are used only as Central Bank reserves, as gold is now used in the monetary sense, then there is no reason why silver also should not be used by monetary authorities in this way.

If there is no reason to suppose that the monetary demands for silver and gold shift in relation to each other to an extent calculated to disturb an established ratio, is there any reason to suppose that non-monetary demands would cause trouble? It is no doubt true that a community wherein the general standard of life was rising would be disposed to keep more wealth in the form of ornaments, and that gold is more efficacious than silver for purposes of display; but it hardly follows that the generations of the future will exhibit a gluttonous hunger for gold in preference to

silver, if we are ready to make some likely forecasts about the future: namely, that the monetary systems of the world will not be so precarious that people indulge themselves in luxuries with one eye focused on the possibility of converting their trinkets into money in a period of monetary chaos; that education and philosophical progress will have dissuaded people from merely gross and vulgar display; and that the defect of tarnishing in the case of silver will have been overcome satisfactorily and cheaply (by washing in rhodium, perhaps).

If, then, we may set aside the fear of the established ratio being disturbed from the side of demand, what prospect remains that relative changes in supply will disturb it? Since the wastage of neither metal is great compared with the supply, it is clear that the smallness of the annual supply, compared with the existing stocks, is a major condition implying the continuance of an established ratio. In times gone by, of course, the stocks of the precious metals were smaller, absolutely, and relatively to their annual increments; that is to say that bimetallism, once established, should become easier and easier to maintain as time goes on.

Nothing very definite can be said about the natural future supplies of the metals, though it is obvious that a monetary value for silver, fixed greatly above the present market value, would stimulate the production of the cheaper metal.

The great demand for gold at present emanates from the monetary authorities, some of whom have fixed its price in terms of their respective moneys; because the stock which they hold is so great, and because their buying power is unlimited, there is no reason why the value should ever be changed again (so long as there is no great force at work altering the value of one currency in terms of another); the amount of money can be varied irrespectively of the amount of gold in their possession, and their preponderance as dealers in gold fixes its value. The same could be true of silver if the monetary authorities chose to make it so.

One further point remains to be taken into account, however, from the side of supply.¹ The atomic scientists, while not engaged in devising means whereby the world may be blown to pieces, have manufactured gold. The alchemist's dream and the 'sound money man's' nightmare have come true! As yet this production has not been effected in 'commercial' quantities; that is to say, the minute quantities produced have been fabulously costly compared with their possible sale prices. Presumably the same process of transmutation could be employed to produce silver. And whilst no 'commercial' production technique has been worked out as yet, our experience of laboratory marvels becoming within a relatively short time industrial projects should lead us to expect a profitable output by such means sooner or later. But this is an argument not against bimetallism but against any metallic standard. If we dismiss the case for bimetallism on these grounds we must rule out the Gold Standard also.

¹ I am indebted in this paragraph to information from Prof. Roy Goslin of Oglethorpe University and Oak Ridge.

Yet the history of bimetallism is by no means the simple and successful affair which the foregoing sketch of present hypothetical possibilities might lead us to suppose. It is a record of commercial dislocation and national rivalry, engendering, for example, the egocentric patriotism of the Mercantile System. Bimetallism for one country is always likely to break down, and bimetallism with different countries trying to maintain different ratios between gold and silver is certain to do so.

It seems astounding that different countries did try to maintain different ratios, but that is in fact the story of the double standard. Obviously, Gresham's Law must operate in such circumstances. For instance, the United States, newly established in political independence, set up a ratio, in 1792, of 15 to 1; soon afterwards, the ratio in France was fixed at 15½ to 1; naturally, the metals went to the countries which overvalued them, silver to the United States, gold to France; in 1834, however, the former country changed the ratio to 16 to 1; thereupon the trend of the metals was reversed, resulting in the virtual adoption of the Gold Standard by the United States, which suffered proportionally larger changes since it was then a country of smaller commercial wealth and importance. France, better able to stand the effect of the change, continued to adhere to the double standard. At the conclusion of the Franco-Prussian War, however, France, whose financial position was aggravated by a formidable indemnity of 5,000,000,000 francs, exacted under the terms of the Treaty of Frankfort,¹ began to experience a great influx of silver, coupled with a drain of gold; in a world in which the leading countries had Gold Standard currencies, the threat of drifting on to a monometallic silver basis (*de facto*) was not to be viewed with equanimity, wherefore France, actuated by political as well as by economic motives, decided to adopt gold.

Such was the death of bimetallism. Since then, its ghost has haunted the United States, emitting effective groans, of an agitating nature, in times of depression. But some of those who cry that bimetallism is "impossible" are concerned, perhaps, only with the political arena, where the beliefs which can be foisted upon a gullible and ignorant public seem more important to the cynical than does the truth; when economic questions become political playthings, the truth always falls to a discount.

✓ *But the bimetallist controversy is irrelevant to-day.*

A case showing the virtues of bimetallism, as opposed to the monometallic gold standard, can be made, indeed, to appear quite strong: the cardinal point is that bimetallism would obviate periodic shortages of

¹ The late Prof. H. A. L. Fisher, dealing in large terms with great issues, writes (*A History of Europe* (1936), p. 994) that "The indemnity was a bagatelle soon disposed of . . ."; this remark would be misleading if divorced from its context and its author's broad perspective: the indemnity was considered at the time to be of crushing dimensions, and its prompt discharge, which occasioned surprise, not to say rage, in Germany, was made at the cost of considerable sacrifice. Remarks relevant to this point may be found in J. Harvey Robinson, *Medieval and Modern Times* (1926), p. 621; D. Lloyd George, *Reparations and War-debts* (1932), p. 78; and J. M. Keynes, *The Economic Consequences of the Peace* (1920), pp. 186-7.

money, alleged to be entailed by the Gold Standard. But such argument (and, equally, the contrary case for gold against bimetallism) makes the assumption of a relation, more or less rigidly determined by forces unstated, between the volume of bullion on the one hand, and, on the other, the volume of money, and hence prices, employment and output. Under the form of the Gold Standard which would be operative to-day in the absence of all the restrictions, as also under the Gold Reserve Standard, there would be no reason why the volume of gold which happens to be held by Central Banks should determine the volume of money. Whilst, equally, the volume of money could be decided irrespective of a reserve of two metals, there seems, now at least, to be no occasion to suffer the disturbing effects entailed in a return to bimetallism, if the benefits claimed for that change can be had without it.

Clearly, a general remonetisation of silver, whose price would have to be fixed considerably above current market rates if the authorities were to acquire a sufficient quantity, would be tantamount to a subsidy to silver producers; that change would have a temporary inflationary effect, probably of no very great magnitude, in the United States, and, to the extent that world prices are dollar prices, this would aggravate still further the problem of the dollar-hungry countries. India, after experiencing a sudden increase in wealth, since her silver stocks are great, might become a large exporter of silver, thereby suffering deflationary pressure. These and other probable consequences would not conduce to orderly progress.

The subsidising of silver production by permitting its use on a large scale in Central Bank reserves might lower the prices of lead and copper somewhat, since these three ores are found together in the natural state; in this respect it would certainly have an advantage over the present system which virtually affords an unintentional subsidy to gold producers; but this is a point of minor importance. On other grounds, there exist the same arguments for and against a silver subsidy as can be adduced in the case of other subsidies claiming no special virtue: broadly speaking, we may say that there is an argument for subsidies in times of acute depression, but not when employment is full. In any case, it is probable that 'more deserving' cases than silver producers and refiners could be found for purposes of subsidy.

In conclusion, we may observe a term invented by Alfred Marshall¹ in the days when the bimetallist controversy raged around the point (*inter alia*) of whether one metal could drive out another in a large area wherein bimetallism had been re-established: suggesting that the metals might literally be fused together, and form a standard amalgam, both for coinage and for reserve purposes, so that one metal could by no means displace another, he called such a state of affairs "symmetallism." Whilst this system might possess the advantage which he pointed out, the benefits to be derived from it can be had, like those of bimetallism pure and simple, without the trouble of establishing a symmetallistic regime.

¹ Alfred Marshall, *Money, Credit and Commerce* (1923), pp. 65-6.

The Gold Standard originated in Great Britain in the eighteenth century.

Great Britain virtually adopted a gold standard early in the eighteenth century, in a manner which can only be described as accidental. As the seventeenth century closed, England was losing silver and accumulating gold by reason of her undervaluation of the former and overvaluation of the latter metal. Before steps had been taken to remedy this state of affairs, England joined in the War of the Spanish Succession; during the War neither metal was brought to the Mint to be coined; after the Treaty of Utrecht (1713), however, large quantities of gold were brought to be coined. In order to prevent the silver coinage being melted for export, therefore, the value of the guinea was lowered, in 1717, from 21*s.* 6*d.* to 21*s.*, on the advice of Sir Isaac Newton, then Master of the Mint. The price of gold was then £3-17-10½ per standard ounce, a figure which established the standard until 1931, with only two periods of suspension, during the Napoleonic Wars and World War I.

This step had a decisive effect only in the sense that it failed to abolish, though it did reduce, the premium given on gold in England as compared with other countries: the effects were to attract to the melting-pot full-weight silver coins, but to leave England in possession of a quantity of short-weight silver currency which was not intolerably inadequate for her commercial needs.

The traditional standard coin of England had been the silver penny, which was in existence some three hundred years before the Norman Conquest. As the centuries passed its silver content was successively lowered. It had contained originally twenty-four grains Troy; by the latter part of the fifteenth century the content was half that amount. In 1504 the first shillings were issued (although the word and the unit of value are much older than this): they were of silver, and the shilling has ever since been of silver, real or *ersatz*. Between 1504 and 1717 there was a surprising variety of gold coins issued: angels, ryals, sovereigns, crowns, George nobles, unites, guineas and subdivisions and multiples of these. Although there was some variety in the practice of keeping accounts, it was the shilling in this period rather than any of the gold coins which served as a unit of account; and that appears to have been the case because of the link which the shilling always possessed in men's minds with the traditional penny. The standard metal was unquestionably silver: gold might be used for the growing volume of commerce and gold coins of the various kinds might be better currency than the clipped and worn shillings; yet until the early eighteenth century it was silver which served as the standard and the shilling as chief unit of account.

At this time gold began to fall in terms of silver, and perhaps this is the main reason why the customary unit of account changed from the shilling to the guinea, and the standard from silver to gold. People naturally tend to calculate their wealth in terms of a coin which is depreciating, and to estimate the coins of the other metal at a premium—other things being

equal. In fact, during the first half of the eighteenth century, instead of passing the guinea at less than its proclaimed value of 21s., they began to think in terms of guineas, and to estimate the full-weight silver in those terms at a premium, and therefore to melt and export it. That way profit lay; to pass the guinea at a discount would have shown a loss in their accounts.

We demanded above that "other things" should be equal as between the rival coins, guinea and shilling; for if the guinea had been represented, for instance, by coins whose purity was doubtful, such a change-over might not have taken place. As it was, other things were not equal: they were in favour of the guinea; so much so, indeed, that they were strong enough, together with the natural tendency at work, to dethrone the ancient shilling from its place in men's minds. Guineas were good coins and the silver ones were old, worn and clipped; the former were constantly being issued by the Mint, and the total stock was plentiful without being excessive; there was little prospect of the supply being depleted on account of melting for export. Furthermore, the scale of commerce had increased so greatly, and values were so much higher than in earlier days, that the guinea had become of suitable size for a large proportion of the nation's transactions. With the guinea as unit, its golden substance naturally came in as standard.

The Gold Standard was suspended during the Napoleonic Wars.

By the time of the Napoleonic Wars, the monetary system of the country had changed greatly: small banks of a precarious nature covered the country. War spread fear for the convertibility of the notes of these institutions; a rumour of invasion occasioned panic: men rushed to convert notes into currency for hoarding. The Bank of England's stock of gold gradually dwindled—because private bankers cashed its notes to obtain coin for their customers; not because men feared the Bank would fail. At the same time the Government was compelled to borrow on a dangerously large scale from the Bank, the amount of bills drawn on it by the army being the subject of particular complaint by the Governors. The double strain upon its bullion reserves, constituting an internal and external drain, was too great: early in 1797 the encashment of its notes was discontinued. This stoppage, which lasted until 1821, is known as the Bank Restriction.

The Restriction must not be looked upon as anything catastrophic: in major wars, governmental needs will always sweep aside the monetary standard. If the Government borrows from the Central Bank, or from the public which discounts its obligations at the Central Bank, that institution's assets and liabilities are thereby increased; but such new liabilities of a Central Bank, whether they are notes or deposits, form a net increase in the volume of means of payment. According to the simple Quantity Theory, therefore, we should expect the value of the monetary unit to decrease. This is what happened in England during the Restriction Period:

in particular, the value of gold appreciated in terms of the now inconvertible notes of the Bank of England. But these notes were readily accepted in payment, just as inconvertible notes were the main form of currency during World War I and since. Gold coins ceased to circulate.

After the close of the Napoleonic Wars, a period supervened during which (as a whole) the volume of money was reduced; since the suspension, also, the volume of money required to sustain the pre-war price-level had advanced by reason of the increase of population and of industrial development. By 1821, the premium on gold had disappeared, and the Bank had accumulated an adequate reserve of gold again; thereupon, the convertibility of Bank of England notes was resumed.

An Act, passed five years earlier, had arranged for a new coin, the sovereign, to succeed the guinea of the eighteenth century; the former was to be proportionately smaller so as to be equal to 20s., with the old price of gold restored at £3-17-10½ per standard ounce. So England returned to the Gold Standard, which she was to maintain until 1914.

The Gold Standard was adopted by European and other leading countries in the latter part of the nineteenth century.

In touching upon bimetallism we have already said something of the assumption of the Gold Standard by the leading nations. In order properly to understand the sequence of events, we must go back to 1849 and 1850 when discoveries of gold were made in California and Australia: the stream of gold which then began to accumulate in Central Bank reserves was large enough to make the countries absorbing it well disposed towards the project of adopting the Gold Standard. Just as England adopted the Gold Standard as gold was increasing in volume and decreasing in value, so did the rest of the world a century and a half later.

Belgium, Switzerland and Italy being possessed, for various reasons, of insufficient stocks of currency, had adopted the French currency units and made French coins legal tender within their frontiers. When the supplies of new gold threatened to displace the full-weight silver currency, these countries had to reduce the fineness of their silver coins. Meanwhile, all their silver coins, now reduced to the rank of tokens, had become legal tender in each of the four countries concerned. But trouble arose because the degree of fineness of the different countries' coins differed, wherefore an agreement was concluded to make all the silver coins $\frac{835}{1000}$ fine, but to limit their legal tender to sums of fifty francs; the five-franc pieces alone remained $\frac{900}{1000}$ fine, were still to be full legal tender, and could be freely coined. By this agreement, France, Belgium, Switzerland and Italy formed what is called the Latin Monetary Union, which was later joined by Greece.

But if the desire for safeguarding the token coinage was the occasion of bringing the Union into being, it also possessed wider aims, and soon developed more. The Union was practically on the Gold Standard at the outset, and the monetary conference of 1867 supported gold monometallism

strongly. But when Europe emerged from the Seven Weeks War and the Franco-Prussian War, the situation had changed; silver was abundant, and France and Italy had paper currencies, though these were but little depreciated in terms of gold. So much silver was coined that the Union had to suspend the free coinage of the legal tender five-franc pieces. This was in 1874. But the provision was made that each country should be permitted to issue agreed quantities of the silver five-franc pieces which were still to be legal tender throughout the Union. This provision had to be rescinded in 1878, because the stocks of five-franc pieces had become excessive. France had been in favour of the arrangement because she had hopes of playing the leading role in a bimetallic area (a fact of political significance), and Italy had also favoured the provision. But it was not, properly speaking, a bimetallic system. Silver remained the standard only by reason of the external support afforded by the gold reserves; when the strain became too great, it was thought better to discard silver as a standard, rather than to drift on to a monometallic silver standard as a result of the operation of Gresham's Law. A condition like the one prevailing in the Union from 1874 to 1878, with silver being maintained as a subsidiary standard by virtue of the gold reserves, is usually called a "limping standard."

France abandoned silver in order to keep the Latin Monetary Union in being; the purpose was not solely political: there was real convenience in permitting the circulation of the foreign coins, and, furthermore, there was the question of liquidating the excessive stocks of five-franc pieces. The Gold Standard, thus adopted, remained in being in these countries, as in others who adopted it about this time, until World War I.

Of other countries, little need be said. Germany has been mentioned already. The Scandinavian Union, comprising Sweden, Denmark and Norway, and similar in purpose to the Latin Monetary Union, adopted gold in 1873; the external trade of these countries being transacted largely with England and Germany, it was of great importance to have the same monetary standard as their customers and suppliers.

In 1847 Holland had abandoned bimetalism, but she had chosen silver, and not gold, as her single standard metal. The force of Germany's actions between 1871 and 1873 was too strong, however, and between the latter date and 1876 Holland changed her standard from silver to gold.

The United States had a paper currency from the time of the Civil War, when notes had been issued in so large quantities that great depreciation in terms of gold took place; this "bulge" was deflated partly by the repudiation of all the notes of the Confederate States, to a small extent by reducing the numbers of the "greenbacks"¹ in circulation by about a quarter in the years immediately following the War, and for the rest by the power of absorption of money shown by a community growing rapidly in wealth and numbers. The Gold Standard was not restored, however, until 1879.

The case of Austria is a record, from the Napoleonic Wars onwards, of

¹ Inconvertible notes issued during the War by the North.

war, tumult and depreciated paper. The old silver standard was, indeed, restored for a period before 1848, but this was a transient reform. At length, by 1879, the currency had so far appreciated in terms of other countries' money, that the restoration of the silver standard would have been easy; but Austria-Hungary decided to adopt gold. A period of monetary management followed, in which it was sought to keep the florin steady, not to make it rise further on the foreign exchanges; till 1882 this policy was successful, and the accumulation of a gold reserve proceeded satisfactorily. Then, however, the florin depreciated (because of stringency and deflation abroad), and it was not until 1892 that the new standard was put into operation, at parities with foreign currencies rather lower than had at one time seemed possible.

Russia's experience was similar to the Austro-Hungarian: when the rouble reached its silver import point, it was decided to adopt gold as the standard instead. This was made very much easier for Russia because prices in terms of gold were appreciating after 1896. After an interval of management on Gold Exchange Standard lines, she assumed the Gold Circulation Standard in 1897.

The Gold Standard was thought to be automatic; it was at least successful in relatively quiet times.

In 1844 large changes (about which more will be said in Chapter XIV) were made at the Bank of England. After that date, its notes in excess of a stipulated amount, known as the Fiduciary Issue, were to be backed, pound for pound, by gold; against the Fiduciary Issue, government securities could be held as the equivalent assets.

There was some hope felt at the time that this arrangement would permit the Gold Standard to work in an automatic manner. The extent to which the system was automatic has been exaggerated by some writers. The theory of automaticity ran thus: if the pound depreciated in the foreign exchange markets, that was because England's balance of trade was becoming unfavourable; she must be importing more than usual, so that Englishmen were requiring more foreign currency than the amount of sterling which foreigners were purchasing to pay for our exports. Such a change, it is perfectly true, would cause the pound to fall on the exchanges. Now England's excessive purchases from abroad must be due to her price-level being higher than other countries': that would, of course, make her a good market to sell in and a bad one to buy from, and would explain quite correctly her greater imports and smaller exports. Since the price-level depended, according to the Quantity Theory, upon the volume of money, it followed that England had too much money.

This is the argument of a man preoccupied with international trade. Now hear Dr. Carp's solution of the problem. Forgetting his endeavours to understand Keynesian theory and reverting to the Quantity Theory of his youth, he says: "In those circumstances England had too much money, then; clearly, she had to be made to have less of it, and other countries

had to get more. And that is just what naturally happened: as soon as the pound passed gold export point, men could make a profit by taking notes to the Bank of England, getting gold and exporting it. The Bank of England cancelled the notes since its corresponding assets had been taken away, and the decrease of notes affected the volume of deposits by ten times the amount, because the banks used to keep a cash reserve of about 10 per cent even if they keep rather less to-day. And of course, just the reverse used to happen in the country getting the gold we had lost: it created the equivalent in notes or coin, and this increased its deposits by some multiple of the amount of gold. So the two changes, the decrease in England's money and the increase abroad, both acted to bring our price-level back into line with other countries'; that corrected the unfavourable balance of trade, and everything was all right again."

"And, you see," Dr. Carp adds, "the whole thing was automatic: it had to happen like that because, when the pound went past the gold point, you could make a profit from exporting gold, and the experts of the City of London didn't miss the chance of making a profit like that; and they wouldn't to-day if the Gold Standard was working properly." (The words, "as it ought to be," shape themselves in his mind, but the expression on the face of Prof. Harp causes him to leave them unsaid.)

However, the penetrating Prof. Harp is able to refute this argument. Musing upon monetary theory he tries to formulate a statement of the proper functions of a Central Bank, and in the course of the researches which this concept evokes he stumbles upon the fact that the Bank of England used to move its Bank Rate upward when serious withdrawals of gold were threatened. The Bank Rate was so influential that the other rates of interest and discount were impelled to move in the same direction as it did. And then Prof. Harp perceives the one and only loophole in Dr. Carp's argument: the changes in the volume of money would act only very slowly upon the respective price-levels, and furthermore the changes in price-levels, when finally brought about, would reflect only after a considerable lag upon the balance of trade, and therefore upon the exchanges. Yet the changes in the foreign exchange rates used to follow very swiftly upon adjustments of Bank Rate.

Thus Prof. Harp bursts forth with the discovery that, although equilibrium in the foreign exchanges might have been brought about in the way described by Dr. Carp—he is careful as a good logician to say this, for it is perfectly true—this was not, in fact, the immediate manner in which that equilibrium was restored. Then by a triumph of deductive analysis, he goes on to show that Dr. Carp is mistaken in his assumptions: that the learned commercial authority has virtually assumed that purchases of foreign exchange are made only for the purposes of international trade. He, Harp, points out that purchases of foreign currency are made for other purposes also and for capital as well as for income account (and he permits himself a digression of a hundred pages or so to define the difference between capital and income).

The upshot of the matter is this: when the pound approached gold export point, the Bank of England used to put up Bank Rate, and other rates of interest and discount went up in sympathy. Foreigners, already able to buy sterling more cheaply, by a small fraction, than usual, could then earn upon liquid capital funds a higher rate of return in London than could be had before. Perhaps, when their funds were changed into sterling, they would buy Treasury Bills, those borrowings of the Government which are repayable in three months; the rate of discount on these would have gone up with the increase in Bank Rate, which was certain to attract foreign investors possessing money which they wanted to keep liquid.

At the same time fewer bills of exchange would be sent by foreigners for discount since discounting would now be costing more in London. And this too tended to send up the pound in relation to foreign currencies, for the receipt of a bill from abroad for discount is the importation of a foreign security, which has to be paid for, like any other import, in the currency of the exporting country (directly or indirectly). Thus a falling off in the stream of bills coming for discount in London meant that London discounters had to buy less foreign currency than usual, while for about six weeks the stream of repayments to London discounters remained unabated. (The usance of bills was most commonly three months; therefore if the stream of bills was steady the average time left to run was one and a half months, neglecting the time taken for the bills to reach London.)

These two results of the increase in Bank Rate combined to push the pound up away from gold export point at once. If the disturbance was serious, a certain amount of gold used to move out from England before the depreciation of the pound was corrected. And such gold movements did have the effect described by Dr. Carp; the effect occurred slowly, and when it was completed Bank Rate could be lowered to the former level (other things being equal). The only comment which remains to be added is that the gold movements would have had to be of far larger dimensions if the swift relief mechanism defined by Prof. Harp had not operated.

The Gold Standard was suspended in World War I; the attempt to restore it afterwards failed.

Such was the Gold Standard, the genuine Gold Circulation Standard of the bad old days when people worked hard for a low standard of living and were contented with their lot. Then came the cataclysm. In the days immediately preceding the outbreak of World War I, something very like panic took place among the London bankers: they strove to amass liquid funds, and many members of the Stock Exchange, whose businesses were run upon funds borrowed from them, found themselves in difficulties. The bankers declined to give out gold, but paid out Bank of England notes, telling their customers to obtain gold from the central institution. The Bank had no office arrangements for handing out small quantities of gold to large numbers of people, and the fact that the gold-seekers were kept

waiting created the impression that there was a run on the Bank; at the same time, the reserve was falling rapidly; for fear that this should become exhausted £1 and 10s. Treasury notes were issued and made legal tender.

Britain did not formally revoke the Gold Standard, but difficulties were placed in the way of those who sought to get gold, and, soon after the outbreak of war, patriotic propaganda enabled the newly issued notes to be substituted, to a gratifying extent, for the gold hitherto in circulation. At the end of 1916, the melting of gold coin was made illegal, and, during 1917, the Government hindered the provision of cargo space for those who wanted to export bullion. Later, the Government, which had taken over insurance against war risk, declined to insure gold. In essentials, while the fiction of the Gold Standard remained, the reality was abandoned with the outbreak of war.

Yet the course of the exchanges did not show a simple and progressive depreciation of sterling. London was, and had been for very long, a very large lender to foreign countries. This took the form of such long-term transactions as the raising of capital to construct railways in the Argentine, and this sort of lending ceased with the outbreak of war; it also took the form of short-term transactions, typified by the discounting of bills. The desire for liquid funds deprived the discount market, as it had deprived the Stock Exchange, of sufficient funds, and London tried to liquidate its foreign assets. This, of course, could not be done at a moment's notice, for the market was trying to obtain repayment in sterling at a time when no firm wanted foreign currency; they wanted sterling; thus there was no one to sell sterling to the foreigners wherewith to repay their obligations in London. Sterling went to a remarkable premium, and finally the foreign exchange market froze: dealing was discontinued.

After the first shock, something like normality gradually reappeared, and the whole London Money Market found itself replete with liquid funds. This enabled the Government to issue great quantities of Treasury Bills, and as well it borrowed on Ways and Means Advances, that is, direct lending by the Bank of England. When the Government borrows on Ways and Means Advances, the Bank adds equivalent sums of assets and liabilities to its resources: the Advances are the assets and the liabilities consist of credit placed to the Government account. Such credit is, of course, new money, and, as the Government spent it upon its military requirements, so it percolated into the currency reserve of the commercial banks. Upon the banks receiving an increase in their "cash" in this way, they could lend some ten times the amount received. But borrowing by private industry was urgently discouraged to prevent competition with borrowing by the Government. In effect, the Government borrowed whatever could be lent.

The great increase in the volume of money had its effect upon the value of the pound in terms of foreign currencies, but the depreciation which it occasioned was concealed or counteracted by sundry devices, and by fortuitous events. Nevertheless, after the early increase in value, the pound

depreciated on the foreign exchanges, whilst prices rose to more than double the pre-war level, so betraying the increase in means of payment. Chance and artifice combined to minimise the apparent depreciation in terms of foreign currencies—the fall in the external value of the pound; prices indicated the true position more clearly, for the fall in the internal value of the pound was by much the greater. It was inflation.

It is a remarkable thing that a committee was appointed during World War I, whose terms of reference virtually required it to recommend the steps which would be necessary to re-establish normal monetary conditions appropriate to the time when the War should be over. Such matter one might have expected to be left in suspense until after the cessation of hostilities. But it is really amazing that this committee (under the chairmanship of Lord Cunliffe, a former Governor of the Bank) should have been set up so early as January 1918—long before the vision of ultimate victory appeared in August, and, indeed, before the spectre of defeat had come at the end of March to haunt the nightmares of the Allied leaders.

Surprising though it is, this committee was at work during the extreme moments of the struggle, and it issued an interim report in August 1918. Naturally, its framers could not foresee the future, and their recommendations reflect the monetary theory of pre-war times.

The Bank of England had devoted as much of its new-found resources as was necessary to the creation of notes in order to form an adequate cash basis for the enormously enhanced volume of credit money; properly speaking, these notes were exchanged for the Treasury's currency notes, and it was the latter, not the former, which formed the cash basis. The limit to the Fiduciary Issue had gone by the board.

The August Report of the Cunliffe Committee did two chief things: it alleged the adequacy of Bank Rate as an instrument of control (of raising Bank Rate to curb inflation), and it strongly recommended that a limit be fixed to the Fiduciary Issue: the maximum note issue permissible should be no greater, it said, than the high limit of the notes actually in circulation during the preceding year. This was a policy suitable for a period of readjustment occupying several years, and it was framed without the foresight to imagine the extraordinary and supplementary devices of control which post-war complexities would necessitate. The Report recognised the truth, which had been suppressed hitherto, namely, that the Gold Standard was virtually non-existent.

Yet with the coming of peace, the exchange rates were let loose, the war-time devices for keeping the pound above the appropriate level being discontinued: a low Bank Rate and plentiful money continued. The Gold Standard was formally abandoned. In 1920, as a result of running counter to the recommendations of the Cunliffe Committee, inflation proceeded unabated. In 1921, however, the authorities definitely 'went deflationary.' Bank Rate was put up to the unusually high figure of 7 per cent, and a large surplus was budgeted for, with a view to collecting and destroying some of the excessive number of currency notes. Furthermore, restriction of lend-

ing was practised. The bubble burst: prices came toppling down, and the volume of output, which had been near to maximum capacity, declined steeply; large-scale unemployment appeared.

These effects had never been intended; but so great was the fear of uncontrolled inflation that the conditions producing the evils were permitted to continue. The situation in other countries certainly constituted a warning against the excessive creation of money. A meeting of experts examined the deteriorating position at a conference held in Brussels in 1920. In 1922 a monetary commission set up by the abortive Genoa Conference examined the financial position of the nations. Their chief recommendation was the establishment of the Gold Exchange Standard to precede a return to a fuller form of the Gold Standard on the part of the countries whose money consisted of depreciated paper.

This recommendation was, in fact, put into practice in a number of cases within the next five years. The restoration of the Gold Bullion Standard was achieved by the nations, but only by means of severe restriction of credit, which reduced their economic activity (notably in the case of Great Britain) to levels of bitter depression.

In Great Britain, depression had brought the pound almost up to the pre-war parity with the dollar (1923); the following year, a relapse of the exchanges occurred on account of greater economic prosperity. In 1925, however, better conditions abroad brought the pound back to parity; the Bank of England had accumulated a sufficiency of gold, and so Great Britain re-established the Gold Standard, at the old price for standard gold of £3-17-10½ per ounce, and with the dollar, which had not been divorced from gold, back at the old parity of \$4.86½ to £1. It did not appear at the time, though it was realised later, that the pound had reached these levels only by reason of purchases of sterling on the part of speculators who correctly anticipated our return to gold at the old parity.

The return to gold by Great Britain was a mistake. Some there were (notably Lord Keynes) who said so at the time. The pound, whose value was truly shown by what it would purchase within Great Britain, was not really worth what the exchange quotations showed it to be equal to in terms of foreign currencies. Thus the period from 1925 was one of struggle on the part of Great Britain to maintain the exchange parities with other currencies which her return to the Gold Standard had established.

Meanwhile, other countries returned to gold in conditions considerably more advantageous than those Great Britain had chosen. Thus she was left struggling to maintain her gold reserve at the cost of continuing depression, with unemployment at over a million. In 1928 and 1929 a speculative boom in the United States provided even Great Britain with some relief, but by the end of the latter year, the boom had cracked and the greatest depression of all time was well on the way.

Austria and Germany got into difficulties first, for reasons connected with the course of international lending.

South American countries were soon in similar straits. By this time

England's position was widely distrusted; the first great moment of the tragedy was not far off: on 19 September 1931 Great Britain revoked the Gold Standard; the mighty pound was severed from its traditional golden anchor, and this in a time of peace. Many other countries followed suit without delay; all did so in the end. The pound, and the currencies of those countries dependent on Great Britain for an external market, remained unattached to gold; they became 'managed' currencies. The United States sought relief from depression by devaluing her currency (April 1933), that is by reducing the quantity of gold equivalent to the dollar. France, Switzerland, Holland, and, for a time, Poland, Italy, and Belgium, remained to form the 'Gold Bloc.' Recovery came slowly, but not in these countries which clung to the Gold Standard. Finally, in 1936, the Gold Bloc was forced to devalue, and the tentative arrangements, described as the Gold Reserve Standard earlier in this chapter, were made.

The phrase 'managed' currencies, used above, calls for explanation: managed with what ends in view? The ends took the forms of social objectives, recovery and stability; these have never been coupled with a distinctive and recognisable monetary policy, although it might be said, in the case of Great Britain, that low interest rates have been maintained consistently. In using the expression, a managed currency, it must not be forgotten that the Gold Standard, even in its purest form, the pre-war Gold Circulation Standard, was always a managed system; the post-war Gold Bullion Standard was more clearly, quite obviously, a managed system. The difference between a Gold Standard currency and a free currency is not the absence or presence of management in the system; management, in the sense of regulation, there is always; the difference lies in the object or purpose of the management: under the Gold Standard, it is the external value of the currency which is of prime concern to the monetary authorities; in the great depression, it was the internal value whose disastrous upward movement forced the authorities to make it their chief concern.

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CHAPTER XI

THE FOREIGN EXCHANGES FURTHER CONSIDERED

Amounts in one currency are exchanged for amounts in another: both exchange rates and interest rates are liable to be affected.

It will be well to inspect the operation of the foreign exchanges more closely than was done in the last chapter. To begin with let us dispose of some misleading phraseology. Certain expressions used to be current, especially in the difficult period between the Wars, which are likely to be heard again. It used to be said, in the financial press and elsewhere, that 'foreign money is flowing into England'; that there was 'a large volume of foreign money (or foreign balances) in this country'; or that 'Frenchmen are transferring their funds to London.' These and similar expressions are likely to conjure up visions of stealthy financiers arriving by air by night bearing strong-boxes full of ten-thousand-franc notes; or to give rise to the notion that foreigners are somehow making a net addition to the volume of money in the London money market by some other means. These things did not happen. The expression 'foreign balances' means in this sense sterling deposits belonging to foreigners; balances in any currency other than sterling are not to be found in England.

Let us describe, therefore, the sort of thing which actually did happen, and is quite likely sooner or later to occur again. Frenchmen, for example, would want sterling for reasons which we will touch upon further in the course of this chapter. They would go to the foreign exchange dealers in Paris and give them francs for the number of pounds which was equivalent at the prevailing rate of exchange. If the sum in question were large, the Frenchmen probably would not want sterling in the form of notes; the stock of pound notes in Paris was anyhow quite small, being kept there for the convenience of persons who wanted moderate sums for making small payments such as those incurred in visiting England. A Frenchman wanting a large amount of sterling would probably take it in the form of a deposit at the London branch of a French bank.

Let us suppose that the same sort of operations which occurred before World War II will occur again, and therefore let us state the description in the indefinite future tense; and let us imagine that the rate of exchange (to begin with) will be 864 francs = £1, which was the rate during the summer of 1948 (neglecting the difference between exchange dealers' buying and selling prices.)

A particular Frenchman whom we may imagine to be a depositor at the Crédit Lyonnais, the largest of the French banks, will want £100,000. Thus

his account at the *Crédit Lyonnais* will be debited with 86,400,000 francs and a deposit will be placed to his credit at the London office for £100,000. The head office will be affected only in that its liabilities have shrunk in Paris and its assets in London have declined. The London office will be affected even less: instead of head office owing £100,000 on its books our Frenchman will possess it.

If the exchange is effected in this way, there will be no more money in London than before. If the Frenchman is going to get sterling, someone must part with it.

But there are two qualifications which we must make. First, instead of letting its assets and liabilities contract, the head office of the *Crédit Lyonnais* might by agreement have transferred the 86,400,000 francs received from its customer to the credit in Paris of its London office. That would leave the volume of credit in Paris unchanged. In that case the London office would not of course debit head office's sterling funds because its assets would have been increased already, but would open a new credit in sterling for the customer. This would be a net addition to the volume of sterling; but the two offices of the *Crédit Lyonnais* would agree to this only if the cash position of the London office justified it. Moreover, we may say broadly that this will happen only when the Bank of England decides that it shall. This then is a different case which we shall consider in Chapter XVII: the 'pure' foreign exchange transaction does not lead to an addition to the funds in London, but only to a change in their ownership.

In the second place, if the Frenchman used his deposit at the *Crédit Lyonnais* in Paris to buy gold from the Bank of France, acting in this respect like an arbitrageur, that would be another matter. That case we have considered already. Here we are concerned with normal exchange movements. Furthermore, it may be, at the future time of which we are thinking, that the Gold Reserve Standard or something like it will be in operation so that the individual Frenchman would not be able to get gold from his Central Bank.

Why then, if foreign exchange operations amount to only a change in ownership, has so much attention been given to them in the past; and why is it that they may be significant again in future? In other words, precisely what are their consequences of moment? Now we found the *Crédit Lyonnais* in Paris losing sterling assets and liabilities in francs: one of the two important effects will derive from these changes. For we may assume that the sterling balance which the head office will have in London to be of about the size which it will find necessary for the convenient transaction of its business in England. Thus it will be impelled to restore its stock of sterling; it will therefore enquire of other banks, either in Paris or London or both, and they will sell sterling to it for francs, but only at a price at which they think that they can buy pounds to replenish their own stock, for they too will want to keep their London balances. In this way there may be enquiries all round the Paris and London money markets for sterling. This desire to buy will send up the price of sterling, just as a

desire to buy cotton will send up the price of cotton, or in other words it will cause more francs to exchange for £1. We assumed the first selling price to be 864 francs = £1; perhaps the effect of the transaction will be to move the rate to 865.

The other important effect will arise from the employment which the French buyer of sterling finds for his money. Before the money stood to the credit of his account at the *Crédit Lyonnais* in Paris, he would be perhaps the holder of French Treasury Bonds of short date, whose repayment put him in funds. If he were no longer willing to hold French bonds, there would be less competition among capitalists to buy these; now since such competition keeps down rates of interest, there will be a resulting tendency for rates of interest on these bonds to go up; or we may say more generally since one interest rate does not move far without influencing others, that interest rates in Paris will tend to go up. In the event, of course, they may not rise because all sorts of other influences will certainly be at work in that market at the same time; but this is part of the second effect which the customer's action will *tend* to bring about.

It might be supposed that having lost a liability of 86,400,000 francs, the *Crédit Lyonnais* instead of its customer might compete for the new bonds of the French Government issued to replace those repaid. But in that event it would *not* be able to restore its London balance without an expansion of credit on its own behalf. But its ability to expand credit (other things being equal) will depend upon the policy of the Bank of France. This would be again the different question of Central Bank policy regarding the creation of commercial bank reserves, or 'cash,' with which we are not here concerned.

Now the Frenchman having the £100,000 in London probably will not keep it idle in the form of money, whereas the head office of the *Crédit Lyonnais* would have kept that sum as a deposit if it had not exchanged it. Without supposing that the owner will want to make a permanent or speculative use of his funds, we may imagine that he will want to earn something on his money but that he will want it to become completely liquid again, that is, to be repaid, within the space of a month or two. Thus we may imagine that he will buy British Treasury Bills, and this action will evidently have the opposite effect from the one produced in Paris: interest rates in England will tend to go down; for the weekly issues of Treasury Bills will go on as before; if the Frenchman gets £100,000 worth of Bills, then someone else will not get them, and a sum of money of that amount will be looking for a temporary home, so to speak, somewhere else.

Thus the whole of the second effect of our foreign exchange transaction will be to push interest rates in opposite directions, upward in Paris and downward in London.

It might have happened, of course, on the day chosen by the Frenchman to buy his sterling that some Englishman, or a number of them jointly, might have decided to buy francs to the same amount. In that event neither money market will be affected; neither rates of exchange nor

interest rates will feel any pressure: the whole transaction will amount to the Frenchman and the Englishman changing places, the former becoming the owner of sterling and the latter of francs, no other change being involved. But whenever there occurs a net foreign exchange purchase such as we have been describing, then there will tend to follow the effects upon the exchange rate and upon interest rates. And when we say 'net' in this sense it means really a net change in the mind of the market or of those who buy there as to the desirability of holding sterling.

If then there has been a net change of mind in the foreign exchange markets, what can have brought that about? Many things could have caused such a change. In considering a change of mind as the origin of exchange transactions we are, of course, excluding all the commercial causes which give rise to the buying or selling of foreign money. Commercial causes, either for income or for capital account, are indeed the most important ones which operate in normal conditions. But there are two further causes of a technical monetary nature to which for our present purposes we should devote greater attention. Thus, in the first place, the original impulse to 'transfer funds to London' might have arisen from the fact that short-term interest rates, higher than those quoted elsewhere, were prevailing in the London market. In that case, the transfer would tend to iron out the differences. The emergence of an interest differential of this sort was a common reason for foreign exchange transactions before World War I. In those days no one expected the Gold Standard to be abandoned except in the event of a major war; and such expectations were reasonable then.

On the other hand, the impulse to effect foreign exchange transactions may derive from the fear that a particular currency will depreciate in relation to others: in our example, the Frenchman might have foreseen a fall of the franc *vis-à-vis* other currencies. If that is the sort of reason prevailing, then interest differentials will be of little or no consequence in bringing about transactions in the foreign exchange markets. Indeed, movements of 'panic funds' or 'hot money' are more likely to widen than to close the gap between the schedules of interest rates of different countries.

Let us consider a practical example somewhat further, for this purpose supposing that the Gold Standard exists in both France and Great Britain, and imagining that a really large 'movement of money,' the equivalent of millions of pounds, destined for investment on short term, takes place from Paris to London. In such a case interest rates in Paris will go up considerably while those in London will fall, whereas we may say for the purposes of our example that they were approximately equal before. If the franc were exactly at par of exchange with the pound, the former will move almost to gold export point, and so be more attractive to buy. If there were no fear for the overthrow of the Gold Standard, or more exactly if there were no fear of a serious depreciation of the franc past the gold export point, then a powerful double incentive will have been gener-

ated to transfer funds the other way from London to Paris. Firstly, there will be a chance of making a fractional profit (within the gold points) when such funds are brought back again in the future from Paris to London, since the franc has fallen low and will probably be more valuable relatively to the pound later on. Secondly, rates of interest having become higher in Paris than in London, funds will earn more in France than at home. Thus so long as the (full) Gold Standard is assured, we may say that a really big movement of funds will tend to produce an opposite reaction, or, to use other words, will tend to be self-correcting.

Before World War I when the volume of bills of exchange was much larger, compared with the volume of money seeking investment on short term, another corrective to big transfers was influential. If, as often happened, large funds were allowed by foreigners to accumulate in London, that pushed up the pound on the foreign exchanges; furthermore, if these assets were invested in large measure in first-class bills, the rate of discount (rate of interest) would be depressed. This caused all manner of merchants to send more bills for discount in London, so sending discount up again and lowering the pound on the foreign exchanges.

Whilst bills of exchange drawn in foreign currencies were not unimportant in the London money market, the bulk of the 'paper' was made up of sterling bills. Most of these arose in the course of Britain's own international trade: we bought wheat in Canada, and the Canadian Wheat Pool drew a bill in sterling on the Millers' Association; we sent glass beads to Africa, and the London merchant drew upon the native dealer in sterling. But sterling was also used to finance trade between two foreign countries: a Rumanian farmer, for instance, might sell wheat in England, and leave the proceeds with a London discounting house instead of turning them into his own currency; when he had to pay for fertiliser from Germany he told the suppliers to draw on the London accepting house in sterling; and they were pleased to do so, for a credit in London was the most liquid form of credit in the world, and much preferable to a credit in Rumania. In course of time, the accepting house got to know the Rumanian farmer well, realised that he was a big man with great resources, and would then accept bills for goods sent to him even though he had no funds in their possession. Furthermore, it was not unusual to find such a case as a Brazilian coffee exporter drawing on a Belgian wholesaler in sterling; the Belgian wholesaler would be known in London, where the market would discount bills of this type too.

It is clear that business of this sort can take place, however, only when the value of sterling is not fluctuating by a margin appreciably greater than the old Gold Standard used to permit. If a bill were drawn on a Belgian in sterling, and the pound went up by 5 per cent in terms of Belgian francs, the Belgian would be faced with an increase in his bill, on the date he had to buy sterling to meet it, which would probably swallow up all his profit. There is one way around this dilemma with which we will deal later in this chapter. It would be unsound to argue that the Belgian importer might

equally have the chance of making an additional profit from a depreciation of sterling, and so find the sterling bill just as attractive in times of exchange fluctuation as in quiet times: he would not be a monetary expert, prepared to use his knowledge of financial conditions to hazard his fortunes in this way. Indeed, largely because of currency disturbances, finance of this sort was of much less importance after World War I than before it.

The 'movement' of foreign balances can upset the exchange rates so seriously as to force the abandonment of the Gold Standard.

It would seem, from what we have said, that, for all the sterling funds in London owned by foreigners, there must have been equivalent balances held abroad by Englishmen. But that was not so. If England imported more goods from abroad than she sold to other countries, that would leave a net balance of sterling in foreign possession. England might 'live beyond its means' in this way, so long as foreigners were prepared to amass sterling balances, without any downward tendency on the foreign exchanges. To be more exact, we must bear in mind Prof. Harp's discovery that there are many other dealings on the foreign exchange markets besides those contracted in connection with imports and exports of goods: there are dividends due on foreign securities held by Englishmen, and interest earned by English capital funds held abroad; money due from foreigners for shipping, insurance and banking services performed for them by Englishmen; and sums sent home by Englishmen abroad. These are current income items which tend to raise the pound on the foreign exchanges. The only large net current income item tending to depress the pound used to be expenditure of Englishmen living or touring abroad.

In addition, there are in normal times items on private capital account: if a London bank lends the El Salvador Government a million pounds to balance its budget, this sum is clearly required in Salvadorean money; the pounds are sold for colones, an operation tending to depress the pound. Similarly in times past with an issue of shares by a company to build a railway in the Argentine, with the difference that the railway material, or some part of it, would usually be bought in Britain and shipped to the Argentine, an export of merchandise partly offsetting the lending operation. Such lending operations are called, of course, exports of capital, but their nature is likely to be understood more readily if they are thought of as imports of foreign securities, for they affect the exchange rates as imports of merchandise do. Naturally the reverse process, repayments of capital, tend on the other hand to raise on the exchanges the value of the currency (i.e. the currency unit) of the country receiving them.

Thus it appears that if Britain has an adverse visible trade balance, her imports exceeding her exports of merchandise, the pound may still be kept stable and sound by other items, the invisible ones. So we must strike a balance of all payments, as Prof. Harp suggested, and say that sterling balances can accumulate in the possession of foreigners only if Britain's

entire balance of payments is adverse; if she has in other words a debit balance when all items are taken into the account.

Just this situation did arise between 1925 and 1931: England was virtually importing capital, of the dangerous, short-term type. It kept the pound up, but when the great depression came on, foreigners began to fear that England must have suffered some grievous losses in the financial crises in Austria and Germany. They therefore 'withdrew' their balances; that is, they sold the Treasury Bills and other short-term securities they held, obtained sterling balances (some held their resources in the form of deposits already), and changed these balances into francs, dollars and other currencies. This pushed the pound past the gold export point and led to shipments of gold; while the crisis was acute, these reached the remarkable figure of £25,000,000 in nine days; the Bank and the Government borrowed between them £130,000,000 worth of francs and dollars to support the pound on the exchanges; but it was no good: Englishmen, as well as foreigners were buying foreign currencies with their deposits: the Gold Standard had to be abandoned and the pound allowed to fall.

If we say that this 'flight' of short-term balances forced the pound off gold, we must remember that there would have been no great net volume of foreign-owned deposits except for the adverse balances of payments on long-term capital account and on income account during the preceding years. We had more than adequate foreign capital assets, of course, but, like an ill-managed bank, we had lent long and borrowed short.

Foreign exchange rates depend upon the relative purchasing power of the different currency units; but Purchasing Power Parity Theory has its limitations.

We may say that the adverse balances of payments, which left us in a position wherein we could be forced off the Gold Standard, resulted, at least in part, from the pound being re-established on gold in 1925 at a level which proved too high.¹ It was the old pre-war level, but the traditional price as such was no sufficient criterion. What is the criterion then? It must be admitted that the criterion is not an entirely simple nor satisfactory one. Stated in general terms the criterion is that exchange rates should be proportional to the purchasing power of the currency units.

Putting the matter in the form of an example we may say that if a composite commodity, made up of specified amounts of all important articles of trade, costs £100 in Britain, 86,400 francs in France and \$400 in the United States, then the exchange rates ought to be £1 = 864 francs = \$4. It is of the substance of the theory that the composite commodities shall be equivalent, that they shall be in some sense equal in the different countries. This is the principle, not newly discovered at that time indeed, which was enunciated forcefully by the late Prof. Gustav Cassel after World War I, and known as the Purchasing Power Parity Theory.

¹ Some economists (notably Prof. Lionel Robbins in *The Great Depression* (1934)) have argued that "courageous" deflation could have corrected this maladjustment.

Dr. Carp, in his practical, business-like manner, is inclined to interpret the Purchasing Power Parity Theory in too narrow a sense. He says: "Yes, I see this: if so much wheat costs £1 in London, 864 francs in Paris and \$4 in Washington, the exchange rates must be $\text{£1} = 864 \text{ francs} = \$4$; otherwise it would pay to move wheat from one place to another. For instance, if the price were £1 or \$4, but the exchange rate was $\$3 = \text{£1}$, it would pay to change dollars into sterling, buy wheat in London and ship it to Washington. The depletion of stocks in London would send the price up here; the increased supply in Washington would bring the local price down, and the purchases of sterling would increase its value in terms of dollars. All these movements might leave the price of wheat at £1-4-0 and \$3.90 in the two centres, and move the exchange rate to—wait a minute— $\$3.25 = \text{£1}$. That would make it just right."

But then a shadow of doubt crosses the mind of Dr. Carp. "Obviously," he adds, "this is true of things like wheat, but you can't say the same of houses or the cost of railway fares or anything like that. And anyhow, purchasing power can always differ between one currency and another by the cost of moving the goods—I mean, wheat can be more expensive in London than in Washington by the amount of freight charges, etc., or the other way round."

The last observation is quite true. But Prof. Harp points out to him (with geometrical illustrations) that his idea of Purchasing Power Parity Theory is a mere truism: if it is to apply only to international trade goods, it *must* be true. In fact, the price of wheat (for example) in London is virtually arrived at by taking the current figure in Winnipeg or Chicago, turning that into sterling at the existing exchange rate, and adding on the transport costs. By analysing costs of exports with the utmost rigour (going backwards in time unto the third and fourth generations), the learned Professor then shows that *all* prices in the home market ultimately enter into the costs of international trade goods; and hence that the Purchasing Power Parity Theory must be applied to all prices.

Dr. Carp's counter-stroke is masterly: applying the theory to the prices of all goods, he produces statistics to show that, in fact, purchasing power differs markedly between different currencies which are clearly in something like equilibrium. Moreover, these statistics are not only correct; they are typical.

Prof. Harp returns to the charge by pointing out that people in different countries spend their money on different things, and on the same things they expend different proportions of their incomes, such that exact statistical correspondence is not to be looked for.

But this does not dispose of Carp's objections: treated in this way, a theory whose utility depends upon measuring small differences, of the order, say, of 5 per cent or 10 per cent, proves to be inaccurate to a much larger degree.

Nevertheless, we can make use of this theory by applying it in a relative sense over time: if we find that in the last year the purchasing power of the

pound (as measured by index numbers) has gone up 5 per cent, and that of the franc has gone down 5 per cent, we have a definite indication that the pound ought to have gone up by about 10 per cent in terms of francs. During periods when exchanges have been free to vary, it can be shown statistically that this happened with sufficient frequency and exactness to be interesting. If, however, the Gold Standard exists, so that exchange rates are not free to vary, we have a measure of the disequilibrium which has developed: in our example, supposing the pound and franc to be on gold at the same parity of 864 francs = £1, we should say that the franc is now over-valued by about 10 per cent; the rate ought to be about 950 francs = £1.

Even so, some allowances must be made: a change in the world demand for a country's exports can affect profoundly the value of that country's currency in terms of others', whilst the price changes affect the purchasing power of all currencies to an approximately equal extent. For instance, if blight ruined all the tea plantations except the Indian ones, the value of India's exports of tea would increase very greatly; the consequently increased purchases of rupees would send up their value in terms of other currencies appreciably. No indication of this necessary adjustment would appear from comparisons of purchasing power.

Similarly, changes of supply can have a disturbing effect. If India suddenly produced ten times as much tea, the exchanges might be affected somewhat gravely. If the demand proved to be very elastic, and the tea sold at little under the figure per pound of the year before, then the value of Indian exports will go up, so strengthening her currency on the exchanges, with nothing in the comparison of purchasing power to show the necessity for this. Contrariwise, the increased quantity may knock the bottom out of the tea market, such that the supply, although ten times as great, sells for a total sum one-half as much as was realised the year before (amazingly inelastic demand). This will depress India's currency, of course, with no indication that it ought to go down from the comparisons of purchasing power.

Again, the imposition of higher tariff rates will render the equilibrium rate for the currency of the protecting country higher than it otherwise would be.

Further, if large numbers of British people living abroad find themselves able suddenly to send remittances to their own accounts at home or to those of other people here, then sterling will be strengthened, whilst the comparison of purchasing power would lead one to expect, if anything, a depreciation of sterling. This is so in the case of all one-sided transfers. If capital invested abroad suddenly began to pay dividends again, the same effects would be produced.

Lastly, capital movements, which are normally large-scale transactions, may disturb the exchanges from time to time.

Thus, it appears that considerable allowances must be made in applying Purchasing Power Parity Theory statistically, but that it remains the only

criterion of what exchange rates ought to be. We need only add that seasonal purchases of a particular currency will temporarily disturb the appropriate exchange rates, and that day to day fluctuations will still occur on account of the fact that desires to buy and desires to sell a particular currency will not be equal from day to day.

The foreign exchange market deals forward also: the technique is a little complicated; with safeguards, a free foreign exchange market is desirable.

Besides the type of foreign exchange dealing which we considered earlier in this chapter, there exists in normal times another sort of contract quite common in the exchange market, namely the forward contract.

We found our Frenchman, suddenly put in funds by the repayment of French Treasury bonds, exchanging francs for sterling; and we observed that his reason for this transaction might have been the calculation that the franc would fall. There would be no reason, in the absence of a ban on forward dealing, why he should wait for the repayment of the bonds. A month before that date, for example, he could have effected virtually the same transaction: he could have gone to the *Crédit Lyonnais* and have made a bargain that he would exchange his 86,400,000 francs with them for sterling in one month from the date of the contract. This is a typical forward exchange operation, contrasting with the spot transaction which we considered earlier.

When our Frenchman buys sterling forward, the rate is agreed at the time of making the contract; the whole point is to avoid having to deal at the unknown rate which will be the spot rate of the day a month later. The customer does not have to pay for the sterling until he gets it, though the *Crédit Lyonnais* may ask for security if it is not sure whether its customer is reliable.

Why should a bank ask for security? It would seem that, if the customer cannot find the money on the due date, the bank will retain the foreign money and so run no risk of loss. Yet a bank selling foreign exchange forward does run a risk, because it at once covers itself by buying that foreign currency spot. For example, suppose the Frenchman buys sterling one month forward at 864 francs = £1: he is contracting to exchange 86,400,000 francs for £100,000 a month later. Thus the *Crédit Lyonnais* buys £100,000 the same day that the contract is made, and keeps it on deposit at its London branch so as to have it ready for its customer on the agreed date. For simplicity, let us suppose that the spot rate is the same as the forward rate: thus the £100,000 costs the bank 86,400,000 francs. Now if the customer were a man of no means, who disappeared and failed to fulfil the contract, the *Crédit Lyonnais* would be left with the £100,000; meanwhile, sterling might have fallen to the rate of 800 francs = £1, so that the £100,000 is now worth only 80,000,000 francs. The customer's failure to fulfil the contract has turned the *Crédit Lyonnais* into an unwilling exchange speculator, who realises a loss of 6,400,000 francs. Hence

the demand for security sometimes made by a bank to those making forward contracts with it.

There are forward markets in existence to-day; but they are shadows of what they were. This condition will pass. We may expect with confidence that forward markets will operate again much as in the past. Thus, rather than taking an example from the present day, it will be more instructive to go back to a date before World War II and to consider some actual quotations of that time. The exchange rates of 1937 given below look to-day a little odd, it is true; but perhaps not more surprising than those which will exist an equal space of time into the future, could we be given a momentary glimpse into the unknown.

There were three customary periods for which forward contracts were made: one, two and three months. Any other length of contract was very rare. A return to this practice is probable.

The method of quoting for forward contracts is somewhat unusual: instead of giving simple figures like 864 francs and \$4.03 to £1, the method employed is to quote so much discount or so much premium compared with the spot figures. Looking back at 1937, we find for 21 January the following quotations:¹

Spot: New York	\$4.90 $\frac{1}{4}$ –4.90 $\frac{3}{4}$
Paris	frs. 105 $\frac{3}{32}$ –105 $\frac{3}{16}$
Forward: New York	1 month, $\frac{1}{4}$ – $\frac{3}{16}$ c. premium.
	2 months, $\frac{1}{2}$ – $\frac{7}{16}$ c. premium.
	3 months, $\frac{11}{16}$ – $\frac{5}{8}$ c. premium.
Paris	1 month, $\frac{9}{16}$ – $\frac{5}{8}$ frs. discount.
	2 months, 1 $\frac{3}{16}$ –1 $\frac{5}{16}$ frs. discount.
	3 months, 1 $\frac{7}{8}$ –1 $\frac{1}{2}$ frs. discount.

Now, Dr. Carp, being well informed, decided to speculate on a rise in the dollar. He bought £100,000 worth, three months forward, hoping that by the time he had to pay for them he would be able to sell them spot for more than he had agreed to pay for them. Now spot dollars were 4.90 $\frac{1}{4}$ –4.90 $\frac{3}{4}$; that meant that dealers would sell to him at 4.90 $\frac{1}{4}$ and buy from him at 4.90 $\frac{3}{4}$; the $\frac{1}{2}$ c. difference in favour of the dealers between these two figures representing the margin from which they made their profit. The three months premium was $\frac{11}{16}$ – $\frac{5}{8}$ c. For Dr. Carp's operation $\frac{11}{16}$ c. was subtracted from 4.90 $\frac{1}{4}$, leaving 4.89 $\frac{9}{16}$. Thus Dr. Carp contracted to receive \$489,562.50 for his £100,000 three months later. On the other hand, if he had been a seller three months forward for the same amount, the rate at which the market would have bought from him would have been 4.90 $\frac{3}{4}$ less $\frac{5}{8}$ c., which equals 4.90 $\frac{1}{8}$; thus he would have contracted to provide some dealer with \$490,125 three months later in exchange for £100,000.

It may seem rather surprising that the premium was subtracted from the spot quotation; and conversely that discounts would have been added to spot figures. Yet this is, of course, correct; for a discount on forward

¹ *The Economist*, 23 January 1937, p. 210.

francs (as shown in the quotations above) must have meant that forward francs were reckoned to be worth less than spot francs; the more francs given for a pound the less they were worth; so to make the forward worth less than the spot rates the discount must be added. Contrariwise, the fewer dollars we get for £1, the more they are worth; the premium indicated higher value, so the premium was subtracted to show fewer dollars and cents for Dr. Carp's sterling three months forward.

A premium is also known as 'under spot,' and a discount as 'over spot.' Thus we can say that one month dollars were $\frac{1}{4}-\frac{3}{16}$ under spot; and two months francs $1\frac{3}{16}-1\frac{5}{16}$ over spot on 21 January 1937. (It may be noted that if forwards are at a premium the larger fraction is put first, and if at a discount the smaller fraction comes first.)

This method of quoting forward rates arises from the fact that the whole purpose of the forward rates is to give a comparison with spot rates: if, instead of quoting two months dollars as $\frac{1}{2}-\frac{7}{8}$ (premium), dealers had told their customer that the rates were $4.89\frac{3}{4}-4.90\frac{5}{16}$, the latter would have had to enquire as well what the spot rates were.

In a forward exchange market the dealing is of a highly specialised type little understood outside the banks and smaller firms which compose the market. It is the sort of institution which was to be found only in the most highly developed financial centres, so that no surprise will be felt that the London forward market was far in advance of others, both in the volume of its transactions and in the attractiveness of the rates quoted in it; that is, the buying and selling rates were closer than elsewhere.

Now what are the factors governing the forward exchange rates? Or, to put the question a little differently, why should forward rates diverge from spot ones? Let us consider a time like 1937, which we may describe as one of tolerable exchange stability with large and sudden movements still regarded as possible. There was not the old attitude of pre-war confidence, which would have regarded 5 per cent–10 per cent movements of the exchange rates as "aberrant, scandalous and avoidable";¹ neither was there prevalent the immediate post-war feeling that anything might easily happen at any time without warning; nor was there the complete control of dealing by numerous regulations liable to frequent change as at present. We may say that in those days, which a period in the future may well resemble, we were between the extremes of stability and instability, and in such circumstances the incidence of commercial demand plays a part, though by no means a decisive one, in fixing forward rates. For instance, suppose that Lancashire dealers were fixing large contracts with American cotton shippers for the bulk of the American cotton coming to this country, for delivery three months later: Lancashire brokers would buy dollars three months forward (that would not be a speculative operation; it would be speculative not to cover in this manner). At that time it happened that there were noticeably fewer enquiries by Americans

¹ A phrase used by Lord Keynes in a famous passage, *The Economic Consequences of the Peace* (1919), p. 10.

for sterling three months forward; that is to say, there was a large balance of forward dollar buying; that would tend to push three months dollars to a premium.

Now watch the arbitrageur at work! He perceived dollars at 10 ¢ premium; he therefore sold dollars three months forward and bought the same amount spot. Say the rate was \$5 spot, and therefore \$4.90 three months forward: he contracted to sell \$490,000 and bought \$500,000; the latter cost him £100,000. When the three months had passed, he handed over \$490,000 from his New York balance, and got back his £100,000; and he was left with \$10,000 in New York, or about £2,000; and this amount of clear profit, earned (without any exchange risk) in three months, was equivalent to interest at 8 per cent per annum—a handsome figure. In addition, the arbitrageur had a balance of \$500,000 in New York in his possession, and that would have been used to earn interest. Thus the arbitrageur operated to bring the spot and forward rates together: by selling forward dollars, he tended to send down their value, and by buying spot dollars he tended to increase their value.

The limit to the operations of an arbitrageur was twofold: in the first place, the amount of funds at his disposal—indeed, at the disposal of the whole arbitrage market—was not inexhaustible. This helps to explain how, in times of great uncertainty, these extraordinary margins came about: a discount or premium equivalent to 8 per cent per annum was by no means unknown, though we were taking an imaginary, and not a likely, example when we supposed a 10 ¢ premium on three months dollars at a time like 1937.

But we might expect that, if the arbitrageurs had not enough funds to equilibrate the spot and forward rates of all the various currencies (without involving any exchange risk), that the public would come in and do it for them. But the forward exchange markets were close affairs: their members dealt among themselves or with known merchants covering future commitments, but not with a member of the public spying a very sound and certain profit. Indeed, in the smaller financial centres, the forward market was little better than a ring, in compact to maintain a somewhat wide margin between buying and selling rates; this proved a powerful negative force permitting variations of forward from spot rates.

In the second place, a limit was provided to the scope of arbitrage by the smallness of the margin between forward and spot: if three months dollars were at $\frac{1}{2}$ ¢ discount on a spot rate of \$5, that would be equivalent to only $\frac{2}{3}$ per cent per annum, which would not be enough to warrant an arbitrage transaction in normal times when better use could be found for the money. The forward rates may be exactly at par (exactly equal to spot rates), as the Dutch rates were on 21 January 1937.

In times like those there were some foreign currencies whose forward rates were determined by the above considerations, and by 'interest differentials,' which will be described in a moment. The dollar was typical of those steady currencies. Other currencies were largely governed

by speculative transactions, that is, forward selling without any spot buying, or forward buying without spot sales as covering. Some currencies' forward rates were so governed most of the time, and most forward rates were so governed some of the time.

Our Frenchman, having heard that the French Treasury will have to borrow heavily from the Banque de France (an inflationary action) during the subsequent quarter, felt sure that the franc would fall, and, having no ready money available, he sold francs three months forward—very convenient for a speculator, for he did not require any money until the end of the three months; and if francs did fall, he did not really need it then. Of course, francs might in fact have gone up by reason of unforeseeable influences; then he would have lost. But those forward speculators had a habit of being right; as a rule, a currency went the way the forward rates suggested. To this point we shall return in a little.

We mentioned the 'interest differential' as an influence in the forward market. In very quiet times, especially when the rigid Gold Standard is firmly established, the difference between short-term interest rates in one centre and those in another (which is what the interest differential means) is usually the chief factor governing forward rates. If short-term rates were 2 per cent in England and 4 per cent in America, it would clearly be better to have funds in America and earn the higher rate. Even with the Gold Standard assured, some variation in spot rates occurs, and the arbitrageur does not have to leave his position uncovered. But to take advantage of the higher New York rates, everyone in the London market wants to buy spot and sell forward, so as to have a dollar balance for the interim; this can be used to buy (say) United States Treasury Bills discounted at 4 per cent. But if all the market is trying to buy dollars spot and sell forward, that drives the spot rate up and the forward rate to a discount; thus the discount on forward dollars represents the reward to those people who consent to hold funds in London, where less can be earned.

When the rigid Gold Standard is assured, the merchant having commitments in foreign currencies has little to worry about: the rate may move fractionally against him, but, unless he is dealing in very large quantities of foreign merchandise with a very small percentage of profit on his turnover, the small movement of the exchange rate will not seriously affect his profits. And it may, equally, add something to, instead of detracting from, them. But it is otherwise when the exchange rates are moving widely.

For instance, a French manufacturer runs his factory on coal imported from England. His order book is full for six months: that is to say, he has contracted to sell products whose manufacture will occupy the factory for the coming six months; in costing these future products, he has included in his calculations £1,000 worth of coal to be delivered and paid for in a month's time. The present exchange rate is 800 francs to £1, so he has included 800,000 francs in his costs; he has omitted to cover by buying

£1,000 one month forward. During this fatal month, the franc falls to 1,000 to £1, perhaps because France goes off the Gold Standard or devalues her currency. Thus, what he included as 800,000 francs actually costs him 1,000,000 francs—a loss of 200,000 francs, which will eat away a substantial part of his profits.

In some sorts of business, a 10 per cent movement of the exchanges may easily mean ruin to a merchant who has not covered himself in the forward market. But if he covers, he is safe. Thus we might expect great activity in the forward market in times of somewhat severe currency fluctuation. Yet, in fact, it is just in those times that the forward markets break down, and dealing comes to a standstill. (Hence the severe effect of exchange fluctuations on international trade.) It is not easy to see why this takes place. It is customary to speak of no exchange risk existing in a double transaction; but, looking at the matter from the point of view of the exchange dealer, there is risk, and plenty of it, if his customer fails to fulfil the forward contract. And times of dislocation, such as produce acute exchange fluctuation, are the times when customers, normally regarded as sound, suddenly collapse without warning. Again, the market will be anxious to limit irresponsible (non-professional) speculation, so that unwonted customers are looked upon with suspicion as speculators parading as merchants, and the facilities of forward dealing are frequently refused to them; none the less if opinion is completely convinced that a currency is going to fall, one way or another the speculators will manage to sell it forward, which will make the market move the forward rate to a discount so heavy as to turn away other speculators. And this heavy discount may stop the bona fide merchant from using the market, as also a high premium will do so, *mutatis mutandis*. The effect of the heavy discount upon exporters and others has been best shown by Mr. Crowther:¹

In the autumn of 1933, for example, when the dollar was universally expected to decline, three months' forward dollars stood at 12 cents discount when the spot rate was \$5.05 to the pound. Such a rate means that, owing to the intervention of the speculators, anyone who wanted to 'hedge' a genuine forthcoming exchange of dollars for pounds (arising, for example, from an export of British goods to the United States, or out of interest on investments in the United States) could do so only at the cost of selling his dollars at a discount equal to about 9½ per cent per annum—a prohibitively high insurance premium. For this reason the method of insuring against exchange fluctuations provided by the forward exchange market is likely to break down when it is most needed.

What this case does not show, of course, is why American arbitrageurs failed to sell dollars spot and buy forward, so making a large profit without risk and bringing the spot and forward rates together. Perhaps the explanation in this and similar cases is that those Americans understanding how such a profit might be made and having adequate dealing relations with the exchange market preferred to devote to speculative purposes all the

¹ *An Outline of Money* (1940), pp. 266–7.

resources which they could raise. Stating the matter more accurately we should say that the 12 c discount was a figure at which the pull exerted by arbitrageurs to draw the spot and forward rates together was balanced by the pressure of speculators to push the rates apart.

Yet, when these things are said, it still seems that the forward market shrinks unnecessarily in unsettled times.

Lastly, there is the question whether forward dealing is desirable. In general, it is; it helps to modify fluctuations which would be greater without it. The strictly arbitrage section, the effect of which is to bring spot and forward rates together, has a smoothing effect distinctly beneficial. The help given thereby to merchants doing international trade is great, and might, apparently, be greater than it is. And when the speculator moves a forward rate to a premium or a discount by his operations, the fact that he is usually right justifies him: he too helps to eliminate sharp fluctuations, whose power for evil is proportional to their suddenness.

But to the last proposition, concerning the speculator, a proviso must be added, and it is a very important one. Speculators on the foreign exchanges (spot or forward) have the peculiarity that they may in certain circumstances, tend to bring about the event they fear—or hope for! The wicked speculator is no mere invention of the sensational press. We know that if shares are bid up too high, or pushed down too low, on the Stock Exchange, they come back within a relatively short time: if the shares of a shipping company are sold as the result of a false rumour, the ships go on running just the same, and the prospect of normal profits brings someone, probably the professionals, in to buy the shares at the advantageous price.

But consider a case of this sort (assuming a normal freedom to deal on the exchanges): the French Government is more or less in straits for money, as usual; it contemplates floating a large internal loan; the speculators then gather together and sell francs for all (and much more than all) they are worth; the franc falls precipitously. Are French capitalists going to invest in the prospective loan? Clearly not: investment abroad will be safer if the franc is so untrustworthy. Thus the floating of the loan is put off; perhaps the Government falls. But money must be had from somewhere. If a loan is impossible, where can it come from? Only one place: the Banque de France. But Government borrowing from the Central Bank is inflationary, tending to raise the price-level, and therefore to depress the exchanges. In other words, the fall of the franc, which was artificial to start with, has forced the Government to act in such a way that a lower level becomes appropriate. The speculators win—to the detriment of France.

This is no hypothetical case, but a real one, a grisly business, mixed up with politics of no very reputable order. In the 'twenties such things occurred. But the evil effects of speculation were overcome, indeed, speculation itself was in large measure eliminated, in the period of the Gold Reserve Standard by the strength of the Exchange Equalisation Accounts.

French speculators, indeed, had been caught ('squeezed') as a result of action by the Government before that time. We should notice that our examination of this matter indicates a point to observe for the future: whilst orderly foreign exchange markets should be allowed, indeed, encouraged, to function, both for spot and forward dealing, some force will be required in the hands of the authorities great enough to prevent damaging speculation of the type described.

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CHAPTER XII

ALTERATIONS IN THE VALUE OF MONEY

Inflation arises from demand outrunning supply.

No words in economics are more troublesome than inflation and deflation. Everyone has a rough idea that inflation is something to do with rising prices, and deflation with falling prices and unemployment; and that both are bad. So in the last twenty-five years we have invented two other terms free from the evil flavours: 'reflation' was coined when we were in a depressed condition in the 'twenties, and 'disinflation' has become current in the present time of high prices and overfull employment.

Dr. Carp finds the idea of reflation quite acceptable. "Not all rises of prices, increases of incomes and expenditures are bad," he asserts: "I have no patience with people who call that inflationary. Of course it isn't. If there are unemployed men and capital goods, and if profits are low, then higher prices and incomes are essential: that's *reflation*, not *inflation*." Prof. Harp has all sorts of awkward questions up his sleeve, but he is sympathetic enough in the face of a real difficulty not to press these at once. "Thus," he replies, "a lowering of prices, incomes and expenditures when that would be beneficial would be disinflation." "Yes, of course: no one wants *deflation*, obviously; but things have got out of hand since the war: too much money chasing too few goods; inflation; and the cure is disinflation." Professor Harp is constrained to ask whether inflation always involves a rise of prices. This troubles Dr. Carp a little because he has in mind that the great American boom went on for years in the 'twenties with no significant rise of prices; but he finds a way out of this difficulty; his verdict is that the price-level ought to fall with any increase in the efficiency of production; therefore that inflation with steady prices is possible.

Prof. Harp asks next what precisely distinguishes inflation from reflation and deflation from disinflation. Dr. Carp is driven to reply that this can only be a matter of judgement ("which depends on a thorough first-hand knowledge of practical realities by men of experience"). But this does not satisfy the Professor: "What appears to me to be lacking in your analysis is the concept of equilibrium." Dr. Carp objects at once that equilibrium never occurs; but Prof. Harp explains: "I did not intend to signify that perfect or ideal equilibrium, in which all elements of the economy are without the impulse towards change, but rather that state of average equilibrium in which expansive factors are offset, at least within a time too short for the generation of a cumulative process, by factors of a restrictive

nature. Now as well as the periods of expansion and contraction of which you speak, there are also these times without net change. *One* of the series of such equilibria is the eminently desirable one of full employment, which we might call an optimum; others are less advantageous. . . ." "The half-dead equilibrium of the slump?" "If you wish to call it so, yes. Now the only distinction which can be made properly between your satisfactory changes and your deleterious ones must have reference, it seems to me, to the optimum. Whereas . . ." "Meaning, Professor, that it is reflation up to the optimum equilibrium, and inflation after that; and that if you go over the optimum, you've got to have disinflation to get back there, and if you go beyond in a downward direction then it's deflation?"

Prof. Harp concedes that that was the idea which he was about to convey. Dr. Carp allows that this is "certainly an idea," but he has two objections: in the first place his experience leads him to believe that reflation up to a point below but near the optimum might give place to inflation; that the practical steps of the reflationary policy might in fact produce inflation; thus that the optimum is too vague for the framing of policy; that it would be for all practical purposes, as he said before, a matter of judgement. Brushing aside Prof. Harp's offer of a theoretical definition, Dr. Carp goes on to object that he (Harp) makes the whole affair too difficult "for ordinary people like myself. Now what was it *The Economist* said about inflation? Yes, that's right: it's 'an excess of demand for everything over the supply of everything.'¹ If you must define things that are perfectly simple, that's all you want. What could be clearer than that?"

But Prof. Harp turns: he contends that all reflation is therefore inflation since transition from a lower to a higher average equilibrium can be effected only by demand outrunning supply; an argument which offends deeply against the common sense of the City spokesman. "But, my dear sir, it is obviously impossible that supply should be outrun while there are men and machines idle. When the community can produce no more, then supply can be outrun; not before. With respect, sir, your view seems preposterous." This outburst, however, enables Prof. Harp, overcoming some remaining doubts, to achieve by irrefutable logic a graceful reconciliation: he shows that supply is outrun when his optimal average equilibrium is passed.

Leaving the worthy contestants, then, we may say that if we are going to use the word inflation properly in a bad sense then it must mean increases in prices, resulting from increases in expenditure, without a corresponding increase in output. But as *The Economist* put the matter with great clarity,² the rising prices are the symptom, not the disease; indeed, the rising prices give relief from the malady and will tend to bring it to an end; the ailment itself being an excess of demand over supply, the limits of supply having been reached. Neither the limits of supply nor the optimal equilibrium, nor full employment is a satisfactory concept: each is vague. In the absence of unambiguous ideas on these matters, we must

¹ *The Economist*, 20 December 1947, p. 985.

² loc. cit.

agree with Dr. Carp's belief that there is some value in the rough idea; but we must proceed with caution, avoiding statements which suggest that the bases of our thoughts are entirely satisfactory.

Prof. Harp's 'less advantageous' equilibria are, of course, realities as we found in relation to Keynesian theory. It is reasonable to speak of reflation lifting an economy upwards from such levels by increases of expenditure and of prices. Disinflation is certainly a useful term, so that deflation can be reserved for the bad sense in which Dr. Carp would use it.

What then is our usual experience of alterations in the value of money? How should they be classified? To judge (like Dr. Carp) by experience, changes in the value of money consist generally of alternating periods of deflation and reflation. Genuine inflation is rare; although, whatever lack of precision attends the ideas, there is no doubt that Britain and some other countries have experienced since the war an inflation derived from wartime necessities and from post-war follies.

We need not fear contradiction in saying that inflation occurred in both World Wars in all the countries long belligerent. We shall see that inflation is indeed a necessary instrument of policy for a nation undertaking modern, total war. But it is not only a modern monetary system which may experience inflation. Indeed, whilst the big wartime inflations depended upon increases in the volume of money, the simple Quantity Theory should make us aware that inflation could occur because of an increase in the velocity of circulation (resulting from an increase in the propensity to consume, or in the schedule of the marginal efficiency of capital, or from a decrease in liquidity-preference, or from any combination of these). Most great inflations have gained their momentum from large increases in the volume of money; but the cause of inflation is always excessive demand, howsoever brought about; and great increases in the volume of money have occurred without leading to excessive demand. Conversely deflation arises from a lack of demand compared with supply.

The underlying cause of inflation may be increased supplies of monetary metals, changes in population, or diminished productivity.

Again, although modern inflations have been pumped into existence by the creation of currency notes, or of notes and bank deposits, yet with a monetary system consisting entirely of gold pieces in circulation, it would be possible to have inflation; which may be called metallic inflation. It would occur almost certainly if stocks of gold were small, and large new supplies were discovered. We shall quote examples of this in the next chapter.

Not so obvious is the case wherein the velocity of metallic money is increased. The fear of invasion in a primitive country might lead border folk to bury their treasure against the evil day; if war were averted after a long interval of suspense, a noticeable increase in the velocity of circulation might well occur, resulting in the resumed sale of goods at their 'proper' prices. An occurrence of a slightly different nature resulted from

the fall of the Persian Empire, for Alexander the Great put into circulation the great golden hoard of Darius III.

We should notice that inflation can occur as a result of population changes. If population increases rapidly, while the aggregate of money remains stable, the consequent rise in the velocity of circulation is likely to outweigh the countervailing decrease in the volume of money per head; further, a rapid increase of population may increase output less than proportionately—another factor tending to raise prices.

But whilst it is proper to isolate causal factors so as to consider their individual effects separately, it may be unrealistic to consider the case of a rapid increase of population accompanied by a stable volume of money. Certainly if we are considering a country like the United States in the nineteenth century we should expect the rapid increase in population to be accompanied by an increase in the amount of money. These are sources of demand tending to produce inflation. But the increase of population, whether it is a natural one or whether it is due to immigration, is also a factor in supply. Thus while demand increases so also does supply, so that we might expect the net effect of population changes to be small unless there are unusual conditions attendant.

Yet the swiftly expanding market, which a rapidly increasing population brings into being, is a force acting upon the schedule of the marginal efficiency of capital, upon the propensity to consume and upon liquidity-preferences. The conditions for unusually profitable production are present, and over-optimism is likely to result, taking the form of excessive demand, periodic inflation and cyclical fluctuations.

If population increases slowly, as in Western European countries at the moment, the net effect upon the value of money is likely to be negligible. The buoyant optimism of 'new' countries is not likely to be found, whilst other causes, such as changes in the volume of money per head, are likely to be decisive.

A slow fall of population is a causal factor to be viewed with circumspection. We have no good historical examples of this, so that we cannot be guided, as Dr. Carp would wish to be, by experience, but must rely with Prof. Harp upon theory. Whilst a slow fall of population as such will probably have little direct effect upon the value of money, the indirect results are likely to be important. If we are to believe the bold vital statisticians who are so fearless in their assumptions, then we must look forward to a period of falling population in Western Europe in the near future, and in most of the civilised world within a generation or two. Now although we might suppose that there will result a greater volume of money per head, and that supply will contract especially by reason of the increase in the proportion of non-producers in the population, so that for these reasons demand will tend to outrun supply and inflation to appear, yet these are not likely to be the effects usually dominant. We believe that the propensity to consume will be affected downwards and likewise that there will be a depressing effect upon the marginal efficiency of capital

which low interest rates will not be powerful enough to counteract; and that these effects will not be just of periodic recurrence as at present but that they will take the form of chronic, long-run tendencies. The net indirect effect of a slowly falling population we expect to be a drag upon the prosperous functioning of the economy; so that deflation rather than inflation will tend to result. We need to say "tend to result," because there is no reason to be downhearted about it: if we understand what is likely to happen there is no reason why we should not take steps to prevent it, for the drag of a slowly falling population is not an ineluctable force.

A rapidly falling population is rather a different matter. If such a thing should happen in future, it is possible that the effects on the value of money would depend on the causes of the fall of population; yet there is a general presumption that the effect would be inflationary. The effects of the Black Death, as we shall see in the next chapter, were ultimately inflationary.

If we bear in mind the idea of demand outrunning supply to produce inflation, it is evident that inflation can occur while demand remains steady; for if deteriorating productivity per head leads to a chronically falling supply, with no factors of production in involuntary idleness, then price increases will be inflationary. Part of our present inflation certainly derives from causes of this sort. Thus if shorter hours, holidays with pay, higher wages due to increased wage rates or to industrial pension payments, etc., and a general tendency on the part of labour to take life easily—if all these developments become marked in future, then we may be faced, in addition to the wider social problem which such tendencies would raise, with a problem of inflation. But whilst inflation coming from these origins could occur, on the whole it is unlikely.

Credit inflations have been larger than others; and also more frequent since credit is inherently unstable; such inflations normally ending in crises.

The more familiar and the greater cases of inflation are those arising from an excessive issue of paper money or an excessive creation of bank deposits. The latter, indeed, has almost invariably needed a somewhat large issue of additional notes to keep the tangible and intangible money in a proportion suitable to the monetary habits of the people and of the banks. This has been true, for example, of Great Britain and of the United States, the two countries in which the cheque-deposit system has been developed most highly.

An excessive issue of paper money may result from the action of the State, of the Central Bank or of the commercial banks if these last have the power of note-issue.

The exigency of war has been the commonest cause of inflationary action by the State. The simplest method is to print notes which are made legal tender. It matters little whether these are Treasury notes or Central Bank notes, or whether they are 'promises to pay' by commercial banks, provided that the Government has the spending of them. So long as the

people will accept them in payment, the printing-press provides the Government with a supply of money wherewith to pay for its extraordinary requirements. It is the fact that the expenses (of paying the military forces, providing armaments, munitions, provisions, transport, and perhaps subsidies to allies) *are* extraordinary that forces the Government to inflate; ordinary revenue cannot be increased in time, and borrowing from the public and the banks on the scale necessary can be done only after some measure of inflation has taken place.

Instead of printing notes, the Government can borrow from the Central Bank, whose liabilities constitute the basis of the credit system. It can borrow notes or it can borrow deposits; it makes no difference which. Let us consider briefly how these borrowings raise the level of prices: the Government pays, for example, £10,000 to an army supplies contractor by cheque on the Central Bank; the contractor pays the cheque into his commercial bank; the Central Bank changes the sum of £10,000 from the balance of the Government to the balance of the commercial bank; the commercial bank adds £10,000 to its liabilities (to the contractor's credit balance) and £10,000 'cash' to its assets; but that disturbs its cash ratio; if its ordinary ratio is one of cash to ten of deposits, it is in a position to lend £90,000 more—not £100,000, for it has already added £10,000 to the deposit of the contractor. Very likely this £90,000 will be lent to the Government; if the bank buys Treasury Bills, that is lending to the Government, and so it is if long-dated war loan is bought instead. Whether the borrower of the £90,000 is the Government or not, the money is certainly going to be spent. It is this large expenditure (based on an original borrowing of only £10,000) which has the effect on prices.

The difference between the printing of notes and borrowing by the Government from the Central Bank does not appear to be great from the point of view of the public. It is true that if the loans are ever repaid or the notes withdrawn, the Government gets the money to do this by taxing the people. So it seems that the people lose in any case. But "the people" are not quite the same people in each case. If the inflation is effected via the note-issue, the people of that time suffer (as we shall see later in this chapter); but if the inflation depends on borrowing, although the real income of the community goes down, those who lend to the Government and others who increase their claims to income-earning assets as a consequence of the inflation have something to set against the straitened circumstances; and, in the case of an inflation dependent on borrowing, the interest, which may be both large and permanent, has to be gathered by taxing the people of the future.

Inflation is a more subtle affair when it is carried out by banks acting on their own behalf and not for the Government. Loans to customers being the best earning assets which they possess, banks naturally tend to increase their loans when they can. They can do this when two conditions are fulfilled: that they can find someone to borrow, and that they have

enough cash. Leaving the latter condition for the moment and assuming that they possess surplus cash, we should notice that banks have three ways in which they may induce customers to borrow: in the first place the banks can accept as collateral such securities as they may have refused earlier on; secondly, they can increase the size of loans given on securities already held by them; and thirdly, they can lower the rate of interest charged on loans. They have some power, therefore, to start an expansion of credit. But once the expansion has begun it develops into a cumulative process; for the new credit when it is spent raises prices, and higher prices mean greater profits, since some costs are fixed and others (notably in the past wages) lag behind the rise in prices; so that conditions are favourable for enterprise and will produce a new demand for loans. Thus the more the banks lend, the keener is the demand for new loans; and the more they accommodate this demand the more certain is it that the increase will not only have to be stopped but also reversed. This is what is meant by the expression, 'the inherent instability of credit.'

To return to the second condition, the adequacy of cash for a credit expansion: if banks lower their cash ratio, which is equivalent to an increase in currency from the point of view of ability to lend, they might generate an inflationary boom all by themselves. But, in fact, little can be done in this way: even the cast-iron British banks, whose soundness no one is going to question, could not start a large expansion by these means. The banks keep an adequate cash reserve and a considerable margin above what is adequate just in case a greater amount of cash might ever be needed; and this comfortable margin they are going to keep; no considerations of profit are going to tempt them to unsound practices in relation to cash. That is not to say that banks in other countries, or even in Britain during the nineteenth century, have never generated inflation by reducing their cash ratio. But it does mean that we can dismiss this case as having no practical importance for us in the future.

Usually, inflation arising from an increase in bank credit has derived from an absolute (and not a relative) increase in cash. How, then, can all the banks, considered together, get more cash? One bank can sell some of its other securities, but that only adds to its deposit at the Central Bank at the expense of some other bank's deposit there. The only really important way in which more cash, which might form the basis of inflation, can be found, is by the Central Bank adding to its liabilities and so increasing the Member Banks' deposits with it.

But a Central Bank is unlikely deliberately to engineer inflation, except in time of war, and then it will be doing only what the Government orders. Its own profits are a minor consideration; its duty is to control the monetary system to the best advantage of the whole country, and, whether it is a private institution owned by shareholders (as the Bank of England used to be), or whether it belongs entirely to the Government (like the Central Bank of Sweden), or whether the Member Banks subscribed its capital (as they did for the twelve Federal Reserve Banks of the United States), the

Central Bank performs its difficult and all-important duty to the best of its ability, and without regard to its profits.

Nevertheless, a Central Bank may well 'expand credit' (increase its liabilities) and, later on, have to contract them. Receiving gold from abroad, it may lower Bank Rate and buy securities, so putting Member Banks' accounts in funds; so the commercial banks begin to expand credit and prices begin to advance; at length (and this may be years later) the Central Bank begins to lose gold; thereupon it sells securities and puts up Bank Rate. Member Banks have thus lost cash and must contract their loans and put up rates; they refuse to give new loans, and would-be borrowers are therefore unable to do the business they intended. But general market prices were only kept at the higher levels by the prospect of the business which cannot now be done for want of loans; so prices fall, and the fall of prices brings losses. If the position really is inflationary, prices will fall suddenly a long way; that will bring bankruptcy to some; the only method of avoiding bankruptcy will be to get a loan to tide over until markets go up again. But new loans cannot be got: there is a crisis, perhaps hopeless panic: everyone trying to sell, no one wanting to buy; prices falling headlong; even the oldest and soundest firms suspected of being insolvent; if there are many small banks, numbers of them will collapse. But if the Member Banks are few and very wealthy, like the British ones, even a serious crisis is unlikely to cause a run on them.

The familiar events of stringency and crisis which we have touched upon can occur also, of course, in circumstances which are not really inflationary. It could happen that an economy was suffering from deflation; that a partial reflation was brought about, but, while there were still unemployed productive agents, that the prosperity either 'of its own accord' or because of Central Bank restriction collapsed in crisis conditions.

Deflation deriving from supply outrunning demand may be caused accidentally or intentionally; but reflationary forces will come into play at length.

As we have seen, the cause of deflation may be described roughly as supply outstripping demand. Deflation is thus associated with falling expenditures and prices; though to be more accurate we must remember that not all cases of falling prices are deflationary: there are falling prices which are disinflationary; and there are those which productive progress will require unless other adjustments are made instead. Involuntary unemployment (not including 'frictional' unemployment¹) is the hallmark of deflation.

Deflation is unpleasant: because output falls off, real wealth falls below the potential; still more does the appearance of wealth shrink: from being 'worth quarter of a million,' a man finds he is worth only £20,000, a change

¹ See J. M. Keynes, *The General Theory of Employment, Interest and Money* (1936), ch. i.

spiritually as well as actuarially depressing. It is not surprising, therefore, that deflation is frequently accidental, and, when intentional, is adopted only because the alternative (which is not always inflation) is considered highly undesirable.

We shall find in the next chapter that the adoption of the Gold Standard in the nineteenth century brought an accidental deflation. Recoveries in the stream of supply after war have also occasioned deflation; but not all post-war slumps have been accidental in their origins. Conscious though not very clear ideas on the part of monetary authorities have also caused deflation after wars; the Central Bank or the Government, or both, expecting to return to pre-war conditions, to the 'good old days,' including the earlier price-level.

What then are the repellent alternatives which have driven monetary authorities to choose deflation? One alternative which has been employed to counteract inflation is a policy of price-fixing: maximum prices can be decreed by the Government either with a view to checking current inflation or with the somewhat vague purpose of returning to about the pre-existing price-level. In the very short run, to the extent that it is successful, a policy of maximum prices is absurd: it is the most certain way of ensuring that demand shall outrun supply; but in the slightly longer run by preventing sales it may so reduce income as to end the inflation. Maximum prices can be decreed, but their enforcement is another matter. Except in modern wars when people will disregard private interests, at least in some countries, the history of maximum-price legislation is one of failure: either the decrees fail to check inflation or they bring about deflation of a particularly stultifying sort. And this for two reasons: unless maximum prices cover every commodity including 'new' goods, producers whose profits are swallowed up by high costs which they cannot pass on will turn to other and less essential lines of production, so defeating the intention of the laws; or the maximum prices by means devious or openly illegal will be disregarded.

But it has not been so much the futility of a price-cutting policy legally enacted which has driven countries to deflation, but the fearful feeling that there is no other path between inflation and deflation; that either the value of money must continue upon its Gadarene course or the sources of demand must be sealed up. The booms after World War I were brought to an end intentionally in several countries with just this thought in the minds of the authorities.

Another reason for a policy of deflation has been the desire to maintain the Gold Standard. Of all countries Great Britain clung the most tenaciously to a policy of deflation between 1925 and 1931 with that object in view; whereas many countries engaged principally in agriculture let fall the value of their currency unit rather than pursue deflation.

When accused of bringing about depression, monetary authorities, or their apologists, have sometimes pointed indignantly to the volume of money existing in their country, showing that it is not less than at some

earlier date when prosperity ruled; thereby hoping to absolve themselves from the charge of deflation. But, even if the figures be corrected for increase in (adult) population, this is not the whole story. The velocity of circulation can fall, while the volume of money remains stable or increases somewhat, and can cause deep depression. It is broadly true, for instance, that bank deposits fell only slightly during the great depression between the World Wars.

When deflation has once begun, strong psychological forces come into play to perpetuate it. Those who are filled with optimism, and neglect the warning signs as the coming of deflation approaches, will lose the more heavily; a proportion of such men will fail and go bankrupt; the pessimists lose least, and appear to their fellows as sound men whose advice should be followed. The pessimists will buy only small stocks of goods, and defer the date for renewals of plant; they will reduce their loans from the banks, and perhaps close down some of their works altogether; they will reduce their staffs to the minimum, and banish all thought of launching out into new lines of business. Now these are the sensible things for an entrepreneur to do if the bad times are going to continue, and perhaps get worse. But what business men do not always perceive is the all-important fact that this cautious curtailment of activity itself causes the deflation to go on; it intensifies the slump and prolongs it.

For all these costs, which the entrepreneur is no longer prepared to incur, made up somebody's income; if business men buy less and employ less, the nation's income falls, and so there is less money to spend on their products; as their losses continue, so they contract their output more and more, which only causes further losses. This is what is called the vicious circle, or spiral, of deflation.

Some business men do, of course, perceive this underlying truth, but they see also that, during a period of contraction, the man who loses least is the one who contracts his business more than the others do. They perceive that the man who has come out best so far is the gloomy Sir Miserrimus Doleful (if the shade of Surtees will permit), who has closed half his works and employs his men only two days a week in the rest. In the prosperous times, Sir Miserrimus was considered rather an unenterprising man, very cautious and conservative; but, since the depression, adventurous and enterprising rivals having failed or retired, old Sir Miserrimus suddenly emerges as one of the leaders in his line of business. When he comes into the Chamber of Commerce meeting, radiating gloom, and tells his friends how he has cut down his losses by selling his warehouse to the Post Office, other men scratch their heads and wonder if they could manage without a warehouse, or scheme to shut their offices and carry on with a roll-top desk in the corner of a warehouse.

All these 'economies' help to strengthen one man against his competitors, but ruin everyone in the long run. How, then, is the vicious circle ever broken? Why should contraction not go on until everyone is bankrupt, including the Government and its creditors?

The answers to these questions are complicated matters; we can touch on only two of the main reflationary impulses. In the first place, there is the force of custom and habit, which operates in the following way: a family which is used to a certain standard of life will curtail its expenditure somewhat in bad times: spend less on entertainments; buy fewer clothes; stay at home for holidays; eat simpler food; perhaps move into a smaller house. But beyond a certain level, it will be very loath to go: rather than live too meanly, and fall in the estimation of friends and relations, the family will spend its savings, hoping, of course, to make good the wastage in better times to come. In other words its propensity to consume, as a fraction of its income, increases until this actually exceeds one, so that the family's effective demand becomes greater than its income, the balance being dissaving.

It is the expenditure of past savings which comes in to fill the gap created by contraction on the part of the business world. When the annual amount spent out of past savings exceeds the amount by which one year's income falls short of the last year's a net reflationary push is given to the economic mechanism.

But what about the poor, who have no savings, or only so little as to be exhausted quickly? Here the second reflationary force lies concealed. In a civilised country, it would be wholly intolerable if numbers of people died of starvation or suffered acute diseases of malnutrition: either the State or the local authorities step in and make provision for the destitute with relief donations. Now if the State raises the required funds by taxation, that does not help to bring reflation, except in so far as it causes those taxed to draw upon savings or not to save so much. Taxation for relief is the transfer of *income* from rich to poor, which does not increase aggregate expenditure. But if unemployment is really heavy (of the order of 10–20 per cent or more), the State may well be forced to borrow in order to pay unemployment benefit. It may, indeed, borrow wittingly, with a view to curing the slump. The whole of such borrowings are spent on current output; the fraction saved is certainly negligible and probably non-existent. And such spending acts like dissaving, tending to raise the value of current production. That way the increase of profits lies, and with the recovery of profits, the economic system is set for reflation, the recovery of the marginal efficiency of capital being of vital importance at this time.

Our economy is more likely to be biased towards deflation than towards inflation.

Our consideration of the underlying causes which make demand outrun supply, or the opposite, has embraced different situations which have occurred in the past; and perhaps the last part of our discussion tends misleadingly to suggest that inflation and deflation must occur in succession for evermore. What is likely to be the pattern of the future?

In one of the most fearless books ever written, *The Economics of 1960*

(1942), Mr. Colin Clark predicted a period of "capital-hunger" beginning with the end of World War II.¹ While he does not positively say so, we are left to infer that the "capital-hunger" will go on until 1970 or 1975; and, when allowances have been made for some events between the appearance of Mr. Colin Clark's work and the present, his argument would suggest that it would go on even longer. Now this "capital-hunger" does not imply a complete absence of unemployment: periodic depressions would be probable, though their severity would be less than that of slumps in the recent past; and individual countries, of which Great Britain might well be one, could be in an exceptionally unfavourable situation. Yet capital-hunger will go together with a buoyant marginal efficiency of capital and the drag on the economy of which we were speaking earlier could hardly be a noticeable factor in those circumstances. With great respect to so eminent an authority, the view must be repeated that the drag on the economy exerted by a gently falling population *will* be experienced, our contention being that over-optimistic expectations have crept into the bases of Mr. Colin Clark's argument.

It is a nice calculation of conflicting imponderables to add up the supply and demand of the future; and there are certainly reasons of capital shortage and matters relating to the terms of trade which will be important over the next four or five years and perhaps longer, making us ready to suppose that this post-war era will not precisely reproduce the last one. But without being unduly fearless we may state the belief that for Britain, and, indeed, for developed countries in general (not including the U.S.S.R. with these), the bias of the economy will be, in a rather remote sense *naturally*, towards deflation and not towards inflation. It seems to work out that all the factors cancel out, so to speak, except the slow fall in the rate of growth of population, so that this may exert a net depressing force upon the next twenty-five or thirty years. The pattern may well be a sequence of deflation and partial reflation rather than deflation and inflation, with supply and demand at times equal in the half-dead equilibrium of the slump.

But if this should be right, it is only the 'natural' bias of the economy: as we said, indeed, above, there is no reason why this should not be corrected by intelligent policy.

Some gain and some lose from alterations in the value of money.

Having touched upon the origins of inflation and deflation, delineating the nature of these processes with a few suggestive dashes and dots to serve as outlines, we should pass now to a brief consideration of effects. But here we can speak more generally of the results of alterations in the value of money, thus including reflation with inflation and disinflation with deflation except where it is necessary to indicate distinctions.

The cases are broadly these: when the value of money goes down, entrepreneurs gain, fixed-income receivers lose and wage-earners stand in

¹ op. cit., ch. vii and viii.

between; conversely, when the value of money goes up, entrepreneurs lose, fixed-income receivers gain and wage-earners stand in between.

We may notice that over the course of the centuries the values of monetary units have fallen, which suggests that those who gain from a falling value of money have had the power to arrange matters of policy in their own interests. If that is so, it has not been the result of sinister conspiracy, nor even of a clear and conscious aim on the part of one section of the people to better themselves at the expense of others; rather has this long trend been favoured because vigorous people have identified the common good with their own, and not altogether unfairly so; and because long-term debt piled up to excess can in effect be reduced by a falling value of money.

It is clear that the different effects of changes in the value of money upon separate categories of people arise from the fact that all prices are not affected equally. If the value of money fell to half during one night, its volume being doubled, and all prices, values and monetary figures in contracts being doubled the following morning, the *relative* distribution of wealth and income would be the same, whilst the absolute figures would not matter in the least.

The first outstanding difference from such a hypothetical and unrealistic case is the fact that wage-rates do not rise, nor fall, so rapidly as the prices of commodities in general. We have seen during and since World War II some rapid relative increases in wage-rates, but it must be remembered that the prices of many foodstuffs, and some other prices including rents, have been held down either by subsidy or by legislation. As to the response of wage-rates to an upward movement of prices in the future, it is more difficult to be certain: wage-earners, or at least trade union leaders, are vigilant now to see that labour does not lose real income because of price increases; but these are times of full, or over-full, employment; if in future reflationary price increases are occurring with a margin of men in involuntary unemployment, then it is probable that wage-rates will still lag somewhat on general price increases and even on retail price movements. We shall touch in a moment upon some further reasons for believing that this will be so. But the lag of wage-rates behind prices should not be expected to be a long one in future; whereas against a downward pressure wage-rates are likely to be not so much 'sticky' as 'stuck,' that is, impossible to drive down at all in conformity with falling prices.

Another important feature of a change in the price structure is that some payments being fixed by legal contract cannot be varied at all in the short run; in the medium or long run new contracts can be made, but by then the movement in the value of money which would occasion a revision of the terms will probably have been reversed. A great number of other payments, whilst not being actually fixed by law, are so standardised by custom and usage that raising them would cause an outcry, unless the fall in the value of money had been very great; and even then the increase in such payments is likely to lag a long way behind the rise in prices. Some

wage-rates, in the narrow sense, fall into this category of partially petrified payments, as do subscriptions, fees for the services of the professional classes, and the like. We may notice, in passing, that retail prices do not move so swiftly as wholesale prices, but we shall not have anything to say about this in the present chapter.

As it becomes clearer who are the gainers and losers from alterations in the value of money, we should remember that one and the same person may fall into both classes, gaining in one capacity and losing in another. Such offsetting, however, does little to mitigate the effects of rising or falling prices.

Why does the entrepreneur gain from a fall in the value of money? The price of his product goes up, but for several reasons his costs, while increasing, lag behind. Firstly, his raw materials, or his stocks if he is a dealer, were bought some time before, when lower prices ruled; so long as the value of money continues to fall he will make a windfall profit, which is speculative in its nature, from his raw materials or stocks.

Secondly, the wages which he pays will probably lag a little as we have seen; as business becomes brisker with the rising prices, the entrepreneur will often be employing his workers on overtime, usually paid at time and a half, or on full time in contrast with short-time employment before prices rose, so that his men will be feeling happier about their higher earnings, at least until they get used to them, and therefore be disinclined to strike for higher wage-rates. If we say that the lag of wage-rates behind the rise of prices, being a function of the amount of unemployment, decreases towards zero as involuntary unemployment is absorbed, we shall probably be correct.

Thirdly, the entrepreneur will gain doubly in relation to his overhead charges: because business is becoming brisker, his overhead charges, notably interest on debenture and preference shares, rent and rates, can be spread over a larger real turnover; and the real turnover is itself worth more per article because prices have risen; thus the percentage of the cost per article attributable to fixed charges goes down for this reason as well. Certain costs which are conventionally reckoned as overheads will increase somewhat, but the bulk remains fixed.

At the other end of the scale are the receivers of fixed income; in monetary terms, they get what they got before, but it buys less; they complain about the rise of prices, and refer enviously to business men as profiteers, not perceiving that the rise in prices is the cause, not the result, of entrepreneurial windfall profits. The chief fixed income receivers are those who own Government securities, debentures and preference shares. Pensioners will become increasingly important in this category. The holders of ordinary shares are not fixed income receivers—quite the reverse. It is they who form half the bulk so to speak of the entrepreneurs, for it is into their pockets that the enhanced profits of brisker business go. Those who manage the great business undertakings are salaried managers or directors drawing fees, though these, indeed, may be expected to benefit in prosperous times

from higher remuneration. They may also be ordinary shareholders in the firms which they manage or direct, or in other firms. But in general it is only in smaller businesses that the manager is also the holder of a dominant block of the ordinary shares.

Other fixed income receivers include landlords, whose rents cannot be adjusted quickly to higher levels of prices; and the State sometimes virtually belongs in this group also, but the case of the State, with which we shall deal a little later in this chapter, is complicated.

Thus the wage-earners standing between would seem to lose compared with entrepreneurs while the value of money is falling, and to gain compared with fixed income receivers. In the aggregate this may be true, but aggregative thinking in this matter as in others obscures the things which are important. We have been careful to speak of *wage-rates* lagging behind price movements. But the welfare of workers depends not upon *wage-rates* but upon *real wages*; and *real wages* depend upon two things, the *price-level* of what workers buy and the *sum of wages* received per week. The advance of that *price-level* as such affects *wage-earners* adversely; but along with it goes an increase in *aggregate monetary wages* per week. Regarding the latter labour falls into four broad groups: firstly, there will be those whose *monetary income* does not improve at all, that is, those who were fully employed, partly employed or unemployed and remain so at the same *wage-rates* or rates of unemployment benefit. Secondly, there will be those who were fully employed, but now begin to work overtime. Thirdly, those who were partly employed and become fully employed. Fourthly, there will be those who were unemployed and become partly or fully employed. Not all cases, as will easily be seen, fit properly into these four groups, but these are the chief ones. It is not possible to say simply which group of the last three gains the most; there is perhaps a presumption that the fourth gains more than the third, and the third more than the second. What is clear, however, is that the last three groups do consist of *wage-earners* who benefit whereas workers in the first group are as before. If we take into account the rise of prices also, this first group's welfare suffers. It is safe to say of the three latter groups, balancing their higher wages against the lower purchasing power, that they gain. This matter is thoroughly complex when it is examined carefully, for in truth welfare consists of other things as well as *real income*. Since we cannot make a detailed examination here and have need of a useful rough idea of the way in which a fall in the value of money affects *wage-earners*, we may say that while *wage-rates* lag those in employment lose and those gaining employment benefit; but evidently this is a very rough statement in summary.

Again, we have spoken of *wage-rates* as a whole lagging behind rising prices. But some *wage-rates* are more elastic, anyhow upwards, than others. Considering those already in employment, some workers, especially highly skilled small groups, may be so strategically placed that they can at once demand higher *wage-rates* and get them. The position of these

workers approximates to that of the entrepreneurs. Other workers, above all the unskilled, will be affected particularly by the existence of unemployment, so that their wage-rates are likely to lag a long way behind unless or until involuntary unemployment is absorbed and inflation sets in. The position of this group approximates therefore to that of fixed income receivers.

A falling value of money will be more appropriate to our economy than a rising one.

Perhaps in our imperfect world there is something somewhere between what is morally right and what is practically expedient which we might call 'appropriate'; which means, of course, 'appropriate' to ourselves in our manifold imperfections. The idea would not appeal to Prof. Harp who would hold that the economist, whether dealing with monetary phenomena or any other, should not concern himself with moral questions which he is neither qualified nor required as an economist to judge; but Dr. Carp would hold that he at any rate was a man of the world and "you cannot blink at facts"; yet even he would probably not like the word 'appropriate,' preferring such a phrase as 'the best you can actually do.'

If we went on to suggest, however, that moral progress consisted of the approach of the appropriate to the right, Dr. Carp would dismiss the contention as "mere theory" and Prof. Harp would find our proposition irrelevant.

In monetary matters the policy appropriate in this sense must take account of social justice, as we call it, so far as we can be sure what this is or is not; but also appropriate policy must keep an eye on the volume of output which may be significantly larger when there is less social justice than when there is more.

As to changes in the value of money, it may be appropriate to bear in mind that business men who gain from rising prices are an actively productive section of the population: if they are too adventurous in their undertakings little harm is likely to be done; whereas if they are not adventurous enough stagnation and unemployment may result; thus we should be inclined for this reason to welcome a policy favouring the adventurous, which is, of course, a policy leading to a falling value of money. We should be unmoved with these thoughts in mind by the loss to the comparatively lethargic fixed income receivers; but we might have some qualms all the same when we remember that the profits of the good times go in large measure to holders of ordinary shares who are not far different in their effect upon output from holders of other securities, or, indeed, from Stock Exchange speculators.

What we welcome and what we do not in relation to the value of money is likely to turn upon our political views. If we are in general content with things as they are, maintaining that except for some unnecessary inflation since World War II the best has been made of a bad job, then we shall want the value of money to stay as it is, hoping that a recovery in out-

put will come in to satisfy in due course the excessive demand which remains.

If we hold on the other hand that our inflation by the extent to which it has caused the value of money to fall has disappointed legitimate expectations, maintaining that such a development is not appropriate to our economy, then we shall want the value of money to rise. But if this is our view, and there are after all somewhat obvious and cogent reasons for thinking in this way, we shall need to be careful: a policy of disinflation may lead very easily to a policy of deflation; and deflation brings involuntary unemployment which is neither right nor expedient. However convinced we may be of the practical virtues of responsible democracy, we should face the fact that in no proper sense are the working man and his family responsible for monetary policy whose most grievous effects they stand unprotected to suffer.

Finally, we may take a rather dangerous view that the value of money ought to fall further, not immediately nor swiftly but slowly as a long-term trend. It is, of course, essential to get rid of our present inflationary bulge which is doing us a lot of harm in the sense of both curtailing supply and turning it into inessential lines of production at a time when we can least afford these things. But it should be remembered that there are two ways of dealing with excess demand: the first is to curtail the demand and the second is to increase supply. The latter would be aided by slowly rising prices over a long period of time.

But a falling value of money requires that the economy be under control.

The problem of curbing demand leads us to look briefly at the national finances. The Government's revenue has been running in the last few years at about 40 per cent of the national income. That is too high.

While the size and the nature of Government expenditure are determined of course by complex political and economic considerations, there can be no doubt in the minds of the Chancellor of the Exchequer and of his advisers that expenditure must bear some relation to the revenue which it is feasible to raise. Indeed the further idea is to be found in the budget speeches of Sir Stafford Cripps that revenue ought to exceed expenditure in times when we are in danger of inflation, as certainly we have been since World War II; this surplus of revenue over expenditure being designed avowedly to bring about disinflation. Moreover there are those who see these budget surpluses as admirable examples of policy based on the best Keynesian theory of the trade cycle; for it is argued that a deficit adds to the stream of total expenditure by the whole nation, whereas a surplus takes away from that stream; thus, since the income of the community derives from its expenditure, that a Government surplus decreases the income of the whole nation, which is the way to bring about disinflation. The argument is, it must be admitted, plausible; but the whole idea arises, we shall contend, from a facile error, from a misapplication of the Keynesian analysis. This contention we must try briefly to substantiate.

It is perfectly true that the policy deriving from the Keynesian analysis is one of Government surpluses in times of prosperity and Government deficits in times of depression. This is a matter which we shall have to investigate in Chapter XVII. It is true also that a budget surplus tends to reduce the community's expenditure and thus its income also—other things being equal. Of these "other things" the one which is really important is χ , the propensity to consume. It is the assumption of Keynesian theory, made in the light of good evidence, that χ , that fraction of its income which the community intends to consume, will be falling in times of normal prosperity; or in other words, as we have seen in Chapter IX, that, as income increases, consumption will increase also, but less than proportionately. Thus, in times of normal prosperity, χ is the ally, so to speak, of a policy designed to prevent the prosperity from becoming a runaway boom.¹ But these are not times of normal prosperity. There are no signs yet of χ beginning to fall; quite the reverse: the National Savings Committee for example is worried, as indeed the Government is also, by the poor results of private savings. And this brings us to the point: there must be always *some* rate of taxation so high as to cause χ to increase. Let us suppose that the Government took not 40 per cent of the national income, but 75 per cent. How could we live on the 25 per cent left? Would there be any chance of saving out of that fraction? It is a fair presumption, we must contend, that there would be no chance at all. We should have to spend all our remaining income to make ends meet: χ , which we think of as being normally a fraction less than 1, would be 1; that is, it would be the whole thing. Indeed, with taxation at 75 per cent of the national income, we might be forced to dissave, to spend past savings, in order to live the sort of lives which we consider the minimum tolerable: in that case, χ would be greater than 1, and the expenditure of the community would be greater than its income. If there are no unemployed resources, therefore, expenditure taking place at a greater rate than income is earned must have an inflationary effect. Since our expenditure gives rise to someone else's income, therefore the community's income must rise.

This is why, then, the disinflationary policy has been so disappointing. At the moment, χ is not an ally, nor will it ever be if taxation is pushed to an excessively high fraction of the national income. The Keynesian system of control will not work if taxation is too high. Of course the malign influence of χ has not brought about wild inflation: the budget surpluses certainly are disinflationary in effect; they are the equivalent in that respect of private saving. But the two influences offset each other: the result is (as in politics sometimes) stalemate.

Some of our earlier tanks in World War II were so designed that the steering operated on the assumption that the tracks would be pulling the

¹ The propensity to consume, χ , is also at a later stage one of the villains of the piece of course; but we are concerned here with inflation and not with combating recession nor with the relief of depression.

weight of the tank. Thus the aspiring tank-driver was liable to find while going down hill that the perverse monster, on being coaxed away from the ditch on the left, turned with the more determination towards it; or, on being urged not to mangle the approaching traffic, that it swerved with all the more villainous intent towards it. Such was the phenomenon of reversed steering, caused by the weight of the tank pulling the tracks. That is the nature of the fiscal dilemma which we face at the moment. If too great a fraction of the national income is taken in taxation, we get reversed steering: instead of a surplus causing disinflation, it will bring about inflation, if the fiscal hill is steep enough. Our fiscal hill is not yet so steep as to do that to an obvious and frightening extent; but we have already lost control of the economic tank, a lethal weapon quite as dangerous when out of control as its armoured counterpart. Without wishing to stretch our analogy to bursting point, perhaps we may observe that the survivors of the phenomenon of reversed steering used to hold that the correct procedure was to apply the brake with vigour. That is what we need to do with revenue: if we are to regain control of our economic mechanism, taxation must come down.

There is, in the opinion of the present writer, no way around what we may call the dilemma of χ : if taxation is put up higher to show a greater surplus, the propensity to consume will increase, and the effect of the greater surplus will be lost by that increase. If the budget is balanced without any surplus, χ may react slightly, but is very unlikely to decrease so far as to produce saving to the full extent of the taxation remitted. Nor is it possible to decree by the power of the Government that people shall not spend, but shall save, a certain fraction of their residual income—unless the Government is to become a totalitarian one; and we may rest assured that we have in Great Britain a permanent majority for the view that such a cure would be worse than the disease of inflation.

But we have observed in Chapter IX that savings are always equal to investment. Is there not, then, a path around our dilemma to be found by regulating investment? There is not. It is true that we could increase the volume of savings by increasing the scale of investment; such greater savings are made, however, only by raising the income of the community; but that is precisely the trouble already: the income is too high, and more investment would only make it higher and intensify the inflation. Then what about the reverse policy, to decrease investment so as to lower the income of the community? That in fact has had to be done already: the reduction of the housing programme in 1949–50 was an example of such a policy. And a very frustrating policy it is. The recovery of our standard of living after the late war depends upon building up again our stock of productive capital goods, upon that first and foremost; and, second, upon a greater supply of durable consumption goods, of which houses are the outstanding need. That is to say: our recovery depends upon investment. It is a counsel of despair to cut down investment; and there is no need for us to despair. There *is* need for us, however, to withdraw from before this

dilemma which we cannot circumvent; to retrace our steps and to seek again the old path of lower taxation, for on that road such a dilemma will not confront us.

Our conclusion is therefore that there is a limit to the amount of the national income which the Government can take in taxation; and while we cannot state that this is an ascertainable figure, we must contend that our experience since the war has been sufficient to show that 40 per cent of the national income is too much.

The dilemma of γ , of the propensity to consume, will not be with us always however. If we brought taxation within sensible bounds, as we shall have to do sooner or later, then the longer-term propositions which we have considered in this chapter are the right ones: when our problem is no longer inflation but deflation, then a falling value of money will be appropriate to our economy. First we must get rid of our inflationary fat; then we can stimulate the body economic and prevent its emaciation with a gradually falling value of money, a healthy diet in moderation.

But we have been considering so far only the revenue side of the Government's budget. There is also the expenditure side. In general we may say, though some may wonder whether this is always true, that the Government collects revenue by taxation only in order to pay for the items of expenditure which it has judged to be essential. What are the major items? Are there any which are larger than they should be? Where could economy be effected? These questions suggest themselves at once.

Out of revenue total not far short in recent years of £4,000 million, something under £500 million per annum has been expended on food subsidies. This matter has become a political issue and therefore one which is difficult to think about impartially. Let us be as objective as possible. What do the people do with the money which they would have had to spend on food but for the subsidies? Do they spend it or do they save it? If they spend it, then the effect of the food subsidies is inflationary; if on the other hand our people save that money, then the result is not inflationary. What is the answer? The answer is to be found in the results of our savings campaign. Our personal savings are not satisfactory. A complete statement of savings is a matter of some statistical complexity: it would be too specialised an undertaking for the present book; therefore we must rely upon examples to indicate the general nature of the whole. In the financial year 1949-50, from 1 April 1949 up to 25 February 1950, we find the following examples:¹

Savings Certificates: Receipts	...	...	...	...	£93,000,000
Repayments	...	...	...	...	£114,650,000
Net repayments	...	...	...	...	£21,650,000

¹ *Records and Statistics* (Supplement to *The Economist*), 11 March 1950, p. 241.

Defence Bonds: Receipts	...	...	...	...	£22,900,000
Repayments	...	...	...	...	£37,307,000
Net repayments	...	...	...	...	£14,407,000
P.O. and Trustee Savings Banks: Receipts	...	...	...	£578,761,000	
Repayments	...	...	...	£609,690,000	
Net repayments	...	...	...	£30,929,000	

Now there is a considerable number of other forms of saving, personal and corporate, to be taken into account in a complete study of this matter. There is in particular a large figure of interest accrued on these three forms of personal saving: it had reached nearly £114 million in the period under consideration. But the fact remains that in these three important forms of personal saving there had actually been a repayment of the principal to the amount of nearly £67 million. That is actually dissaving. In the light of these three important pieces of evidence, are our savings in a satisfactory condition? With savings needed urgently in order to dispel inflation, they are not satisfactory. Do the people spend or save the money of which the food subsidies give them the disposal? In some large measure at least they spend it. Are the food subsidies inflationary or not? They are inflationary. It was for that reason that the Chancellor of the Exchequer in April 1949 announced that rates of food subsidy must be limited, and the prices of certain foods be allowed to rise. We could both curtail the excessive demand which exists still, and relieve the intolerable weight of the budget, by paring down the food subsidies further. This would entail a rise of prices, which would be unpleasant for fixed-income receivers, but these should share in the relief from taxation which would be made possible. Such a rise of prices would solve, or almost solve, our inflationary problem.

Another item of nearly £500 million in Government expenditure is incurred for interest on and management of the National Debt, which has more than tripled as a result of World War II. From the fiscal point of view, the conditions for paying interest on the National Debt are very favourable at the moment. For other reasons it may prove necessary to advance interest rates later, in which case the interest on the National Debt will go up; not very much, perhaps, but it will go up. There is no economy to be expected in this item.

Another large item, which has been growing recently, in the budget expenditure is the health services. There is no division of political opinion on the desirability of these. But if we can pay for these only at the cost of inflation, which causes us to decrease that investment on which our recovery depends, then must we not ask ourselves how much we can afford in the way of health services? On 14 March 1950 Sir Stafford Cripps

admitted in the House of Commons that there must be a "ceiling" over health expenditure.

As to other large items of budget expenditure, perhaps some economy can be made in the defence services' vote by greater efficiency in expenditure; but we can hardly expect a substantial reduction here if we are to fulfil our international obligations, which are increasing rather than decreasing.

These four, food subsidies, service of the National Debt, health services and defence, are the four largest items of budget expenditure, amounting to more than half of the total; only small economies can result from paring down the smaller items. Nothing can be done about the National Debt service; students of international politics are inclined to the view that nothing substantial should be done to lower the defence votes; and yet our argument has tended to show that we must curb inflation by reducing taxation. It is hard to escape the conclusion that both food subsidies and the charge of the health services on the budget must be reduced.¹ If it must be one of these which is 'cut,' many will feel that the food subsidies rather than the health services should be reduced.

Yet have we said the last word on budgetary matters in urging that taxation be reduced from the present excessive level? We have not. There is a longer perspective in which also the budgetary problem must be viewed. Drastic budgetary economies might reduce the revenue within a few years to, let us say, 25 per cent of the national income. At that level we should be able with budgetary surpluses to hold in check inflation. But the total of revenue would still be great: we should not be able as taxpayers to dismiss with a wave of the hand our annual contributions to the Exchequer. What condition, then, would make our still large taxes easier to pay: a steady national income or a rising one? It is manifest that a rising national income would ease our burden. And to a rising national income, which of the two is conducive: a rising value of money or a falling value of money? It is of course the latter. Thus in the long period of time a slowly falling value of money will render more manageable a large national budget. This is not a simple maxim automatically to guide the hands controlling policy; it is on the contrary a dangerous precept, calling for steady skill and wise judgement in those bold enough to follow it; for if a successful political party were blindly to accept the simple faith that 'rising prices are good,' serious inflation would become an ever-present danger and probably an appalling reality destructive of the sober work of generations. But if our contention be correct that the natural bias of our economy will be towards deflation, then it will be appropriate, in our particular sense, to counter this with a falling value of money.

So our argument results in two findings, one immediate and one of long range: first we must reduce taxation and do so severely; then, as the

¹ It is clear of course that the cost of the health services to the budget can be reduced either by decreasing the services or by requiring persons receiving the services to pay for them, or by some compromise between these two methods.

decades pass, we want the national income gradually to rise and the value of money slowly to decline. It is our long-term conclusion which is the more important.

The foreign exchanges will be affected by changes in the value of money.

So far we have been concerned with the internal value of money. Our brief studies of the Gold Standard and of the foreign exchanges suggest that the external value of a currency will go the same way as the internal value. But it is evident that in relation to foreign currencies there are three cases to be considered. Firstly, let us suppose that a rigid form of the Gold Standard exists and is to be preserved at all costs. Then if one country becomes more expansive than others, thereby causing the value of its currency unit to fall, the effect will be exactly similar to that suffered by a commercial bank which tries to lend too much. We know that such a bank will lose some of its Central Bank balance at the clearing; so also will an unduly expansive country. In this case the balance at the clearing will take the form of gold movements. If Britain expands its volume of money, for example, so that prices go up in relation to those in other countries, the pound will go past the gold export point, and she will lose gold. This means that Britain *must* bring up the value of the pound again since it is assumed that the Gold Standard is to be preserved at all costs. Conversely an unduly deflationary country will attract gold; and here 'unduly' means no more and no less than relatively to other countries; it has no relation to what we may consider 'appropriate' on other grounds. In other words an autonomous national monetary policy is incompatible with a rigid form of the Gold Standard. If such an international standard is to be maintained whatever betide, then countries must keep in step or nearly in step. We might suppose that each country's stock of gold would provide margins within which it could deviate for a time from the common policy. But unless methods exist whereby speculation can be countered, a country which lets its gold stock run down to any large degree will be in danger of being forced off the Gold Standard. Thus, unless it is a very large one, the gold reserve is inclined to have the character of an inedible iron ration: when wanted it cannot be used; wherefore countries will be constrained to keep somewhat exactly in step with the monetary policy of their neighbours. To accept a rigid Gold Standard policy is therefore to abdicate the responsibility of pursuing an appropriate monetary policy. Is the government of any great power prepared to do this to-day?

Let us consider, secondly, the case at the opposite extreme: no Gold Standard; no exchange restrictions; and, to make the absence of rigidity complete, no artificial barriers to international trade. For this case we need to assume only the broad truth of the Purchasing Power Parity Theory, which is undoubted, to perceive that any country causing its currency unit to depreciate at home will cause it to fall also on the foreign exchanges. There is abundant evidence that it will fall more rapidly in the latter than in the former market; for the good reason that the income of

particularly acute and expert dealers depends upon a correct appraisal of the relative worth of different currencies. Now if countries are pursuing similar policies in relation to the values of their respective moneys, all may still be well: if all home values are falling equally, foreign exchange values will remain stable provided that no great difference in productive efficiency is coming into being; that the terms of trade are not altering seriously; and provided that no large capital movements are occurring. And it is important, of course, for both international trade and lending that serious fluctuations of the exchanges should be avoided. Now we have laid down four conditions necessary for unregulated stability of exchange rates. On the whole it is too much to expect that all of these will be fulfilled regularly over periods sufficiently long to be interesting: there is no certain tendency for the four influences to offset each other; thus such stability would be too much of a coincidence for us to pin our hopes upon it. It is the first condition, that countries shall pursue an equal policy as to effects on the value of money, which will not be fulfilled; and that force will be of the greatest effect upon the exchanges. Some countries having relatively little international trade might be able to disregard the fluctuating exchange rates which we have found reason to expect; but it seems, when we bear in mind the limitations of the forward market, that such a country as Britain, whose international trade is vital to her, cannot bear the risks and uncertainties of free exchanges.

Thus we are led to consider the third case, the compromise between the two extremes. If we had a somewhat flexible but not entirely free relationship between foreign currencies, that would be, to use our term in a special sense again, appropriate. A country could then pursue its autonomous monetary policy and use its gold stock the more effectively to assure stability. The Gold Standard which we expect to operate in conjunction with the International Monetary Fund¹ will resemble the Gold Reserve Standard, however, in that it will permit any currency to move to a new parity with others when the underlying condition requires it. What is this underlying condition? Put simply it is the internal purchasing power of the currency unit in question; but this value not just at a particular moment, of course, but as foreseen over a period of months or years. Thus if we want to pursue a policy entailing a gradual fall in the value of money, in course of time we should possess, it would appear, the sort of international arrangements suitable for that policy: we should have adjustments from time to time, of the order of 10 per cent perhaps, among the different currencies, correcting deviations of internal purchasing power, and in between these occasions we should get exchange stability. And this is probably what we shall get.

Alterations in the value of money recoil upon the revenue of the State.

We have mentioned the State as sometimes falling virtually into the group of those who lose from a falling value of money. But if it is a gradual

¹ See Chapter XVIII.

fall which is occurring over a long period of time, the State will benefit: revenue will be buoyant; the same rates of taxation will bring in higher yields. For a country like Britain this will be true both of direct and of indirect taxation.

If the value of money is rising, yields are likely to remain steady, unless deflation supervenes, as it may do so easily when prices fall. Deflation entails depression, of course, and a shrinking national income, from which the yields of taxes will be less than formerly. If the Government is guided in these circumstances by the idea that the budget should be balanced annually, then it will be faced with the necessity of curtailing expenditure, a course of action which will only aggravate the depressed conditions. But probably by now we have outgrown that illusion of the 'sound money' advocates: faced with depression and a shrinking revenue the Government should boldly unbalance the budget and should take other steps leading to recovery.

Finally, if the value of money is falling headlong, as in a runaway inflation, the Government, which is ultimately responsible, will defeat itself. Supposing to start with that it is not the State itself which is adding the new money to the stream of income, we should notice that its taxes are collected nearly a year after their imposition; if there has been rapid inflation in the interim, the monetary revenues budgeted for are probably exceeded by a great margin: they may be doubled even. But, in such a case, the purchasing power of the revenue, although its monetary size is enhanced by inflation, will have deteriorated. Instead of the £4,000 million budgeted for, the Chancellor of the Exchequer might with thorough-going inflation, secure £10,000 million; but he is likely to find that the level of prices has moved from 100 to 500, so that the huge revenue realised is worth very much less than the old revenue at the old price-level. This is not, indeed, the whole story, for by no means all of the Government's expenditure fluctuates with the general price-level: of the National Debt, at present receiving about $13\frac{1}{2}$ per cent of expenditure, the bulk will not require refinancing in any given year so that that item will be little changed; it may be possible to starve the armed services of funds; yet the pressure on the State to increase the large payments for social services may well be irresistible; and what happens if the Government is determined to maintain food subsidies such as to stabilise the cost of food to consumers defeats the imagination. As the inflation goes faster and more furiously the situation of the State will become more and more insupportable. And if the Government unbalances its budget in these conditions it will only intensify the inflation. The only end of the matter must then be repudiation of the money of the country.

But if the State is itself the source of the new money, the case is different; for the issue of the new money is itself a form of taxation. If the Government prints notes or borrows deposits from the Central Bank in order to pay its way, all other spenders of money suffer, each broadly speaking according to the amount of his expenditure, and according to the lag of his

purchases behind those of the State. The current benefits to the State from the spending of such new moneys are likely, at least to start with, far to outweigh the real loss in the revenue. That is why inflationary issues of money occur in wartime: this is the only practicable method of raising enough money in time.

Again, if the State has borrowed from its own nationals a hopelessly large amount, as the French Government did during and after World War I, so that an unbearably large portion of the maximum taxation tolerable must be spent in paying interest on the National Debt, then a falling value of money may be the best route back to an 'appropriate' balance in the economy, even although this course entails inflation. Certainly this way out is expedient rather than honourable, for even to-day many of the victims would not realise that their debtor was deliberately engineering the real cancellation of part of their savings.

After severe inflation the State has a choice of unpleasant policies.

If a phase of acute inflation has occurred, so that the value of money has fallen to a quarter, a tenth or less, what is the best thing for the Government to do? Should it try by deflation to return to the former level of prices or should it attempt approximate stability at the current price-level? These are somewhat open questions depending in part upon other attendant circumstances. But a broad distinction may be made between a fall in the value of money which has taken place very rapidly and one which has occurred slowly: in the former case there is reason to find deflation 'appropriate,' and in the latter case devaluation. If, for instance, Britain experienced an exceptional earthquake in the summer of 1951, necessitating relief measures which could be financed only by a very inflationary policy, so that the exchange rate, to use that as a measure, went to £1 = \$1, she would be well advised, knowing that the next shock would not occur for decades, to try to return to something like a rate of £1 = \$2.80. But, if, on the other hand, Britain, harassed by twenty years of earthquakes, each of which had necessitated a new inflation, emerged shock-proof to find her currency at £1 = \$1, it would probably be more 'appropriate' to stabilise at that level.

The case of devaluation versus deflation has usually arisen after major wars. Since wars are generally of some years duration, there is a presumption in favour of devaluation. Deflation is likely to make the period of demobilisation one of severe suffering. But devaluation in relation to foreign currencies alone may not be a simple nor a sufficient policy. What will be wanted is to stabilise the internal and the external value of the currency unit. A country might want to fix its exchange rate with the American dollar and to stabilise prices at home. But if the dollar is itself falling in value, the policy cannot be put into operation: it becomes impossible. To fix the gold value of the currency unit would not help, for the value of gold will fluctuate with the major Gold Standard currencies (at present with the dollar, of course). Thus the choice may be inevitable

between a stable internal and a stable external value of the currency: for any country to achieve a compromise solution would not be easy. We should certainly observe in this respect, however, the outstanding case of Belgium, where under the leadership of M. Camille Gutt a drastic but rapid deflation was carried out after World War II, with the result that Belgium's economic house has been in better order since then than that of any other country.

There is another course open to the Government of a country whose currency has depreciated greatly on the exchanges and in purchasing power. There could be a capital levy; that is, an enactment compelling every national to give a specified percentage of his total wealth to the State. The object of the capital levy is to enable the State to obtain possession of a proportion of its own obligations (the National Debt) and also, usually, of the note-issue. When a proportion of these is acquired, it can be cancelled. Thus the total of debt within the nation is reduced; its real capital assets become thereby less encumbered, and, since these remain the same as before in real terms, the volume of debt secured by them is greater in value per unit. When part of the note-issue is cancelled, the value of the monetary unit is obviously enhanced in purchasing power and therefore in foreign exchange value also. This is deflation of a kind, but not the slow torture involving a lowering of profits, stagnation of business and unemployment; it is a surgical operation to excise the redundant fat, obviating the attenuated and painful alternative of starvation.

Although Lord Keynes lent his great authority in support of a capital levy in 1923; although a democratic Czechoslovakia put such a policy into operation successfully after World War I; and although the U.S.S.R. has carried out after World War II a deflation of its currency by methods essentially similar; none the less there remain great objections to a capital levy, particularly if the rights of citizens in private property are still regarded. No one will question that it is the most straightforward and apparent manner in which retrenchment can be faced. At the same time, one must recognise the technical difficulties: the State does not want to acquire cows from the farmer, for instance; on the other hand, to require its nationals to pay their contribution to the capital levy only in notes or war loan also raises difficulties; for the people will feel very aggrieved if they have to realise some of their assets forthwith, obtaining only the very low prices which would prevail in a general selling movement; and if, alternatively, the Government permits a considerable margin of time for the payment of contributions, that period is going to be one of ordinary deflation, which it is the purpose of wise statesmanship to avoid.

It used to be said that there was a difficulty more formidable for a successful capital levy than the technique of collection, namely the problem of preventing capitalists from transferring wealth abroad. But we have changed all that. If the hyperbole may be excused, it can be said that in those days a man could do anything unless the Government enforced a law preventing him; now he may do nothing without the specific permis-

sion of a Government Department. We may say that in countries where regulation is less complete the transfer difficulty can be overcome only at a time of very genuine and deep patriotic fervour: the quality of public unselfishness may be somewhat used up after severe warfare.

In the modest forerunner¹ of this book there appeared the following final comment on a capital levy.

Further, a political programme including a capital levy is so vulnerable to electioneering opponents that it is almost impracticable in a democratic country; it would be cynical to say that it is too honest to be possible, but at least political opponents will be horribly tempted to put into operation the less noticeable alternative of devaluation, having permitted a further period of inflation, if necessary, in order to mitigate the burden of internal debt.

The case of a capital levy not included in a political programme was not foreseen, not even a once-for-all levy, calculated upon income. So our own little capital levy of 1948–49 must be mentioned—with regret: it is not good for the common weal to enact venom.

BOOKS

Concerning our present inflation:

The Economist, 1947 and since, *passim*; particularly 20 Dec. 1947, p. 985.

Regarding inflation and deflation in general:

J. L. Laughlin, *Money, Credit and Prices* (1931), vol. II, ch. xxiv.

Edwin Cannan, *Money* (1935), pt. I, ch. ii and iv.

R. G. Hawtrey, *The Art of Central Banking* (1932), ch. iv.

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Geoffrey Crowther, *An Outline of Money* (1940), ch. iii.

A. G. Hart, *Money, Debt and Economic Activity* (1948), ch. x.

Charles R. Whittlesey, *Money and Banking* (1948), ch. xxv.

As to the effects of alterations in the value of money:

J. M. Keynes, *A Tract on Monetary Reform* (1923), ch. i and ii.

D. H. Robertson, *Money* (1935), ch. i, paras. 6 and 7.

¹ *An Introduction to Money* (1938).

CHAPTER XIII

SOME HISTORICAL EXAMPLES OF MONETARY FLUCTUATIONS

Monetary fluctuation has played a part in changing the history of nations: the decline of Rome; the Black Death; the successive ascendencies in Western Europe in the sixteenth and seventeenth centuries.

HISTORY textbooks are accustomed to devote considerable space to military details, to kings, emperors and persons holding administrative office, to inventions and discoveries, to the arts and religion; but large monetary movements are inclined to be overlooked, to the detriment of the balanced view. Often public finance does find inclusion—as an incidental connected with war.

The military agglomeration of the Roman Empire reached its zenith at the dawn of the Christian era, after a period wherein the supplies of the precious metals and their velocities of circulation had been increasing. It is doubtful whether stocks of bullion were actually falling during the long decline of the Western Empire, but it is certain that the rate of increase (if any) was slower than before. At the same time, commerce was severely handicapped by monetary debasement, which finally produced acute crisis in the third century A.D.; it is probable that the velocity of circulation was falling. And as the Dark Ages drew near, a tendency can be distinguished which we may describe as a change in liquidity-preference: a change, that is, from the creation of real wealth in the form of roads, buildings and so forth, to the sterile hoarding of bullion. We should be wrong to look upon these essentially monetary movements solely as effects of deeper causes; they were among the potent forces which helped to set up and then to destroy the Roman Empire.

The retrogression of the Dark Ages gave place at length to the scarcely perceptible progress of mediaeval times. But in the middle of the fourteenth century fortuitous events hastened the placid tempo of change. The Black Death seems to have been a series of epidemics, of which some at least were bubonic plague. The Black Death appeared for the first time in England in 1348 and recurred several times in the years immediately following. Whilst the statistics are little better than guesses, perhaps it is true that half the population of England perished; and in some parts of Europe the mortality was greater.

This then is an example of a rapid fall in population, which was mentioned in the last chapter. Now in that time the volume of trade was small in relation to output: most of the people were agricultural

and nearly self-sufficing. Furthermore the religious idea of the just price, which meant an unchanging price, was still powerful. Thus England emerged from the plague possessed of the same amount of gold and silver as money, but able to effect only about half the previous volume of transactions. In these circumstances, thinking of Irving Fisher's $MV = PT$, we might expect a rapid increase in the general price-level. But for reasons which we have suggested, there can be no doubt that V fell to a degree resembling the fall in T . It must have been the case that people who were used to spending money only rarely on genuine necessities or on the meagre conventional necessities of the time did not feel impelled to put their greater hoards of money into circulation. But one particular sort of price was exceptional, namely wages. These certainly did rise.

In the manorial villages during the thirteenth century, and in some places on a small scale before then, commutation had begun; that is to say, the villeins who owed labour services to the lord of the manor had begun to commute these for payments in money, the lord being thus enabled to hire labour for the cultivation of his demesne; which change was an arrangement agreeable to all, making the villeins the masters of their own working lives and for the advantage of the lord leading to better husbandry in the demesne.

The scarcity of labour occasioned by the Black Death led to demands for higher wages and to new demands for commutation. Lords of the manor would normally have resisted the first claim in any case; the prevailing conditions led them to resist the second demand also. They were, indeed, in no position to pay higher wages: their rents of both sorts, in work and in money, were depleted by the disappearance of whole families; and the remaining rents could not be raised since they were fixed by agreements, some very old, having the force of law. Moreover, they could no longer view with tranquillity the prospect of commutation, for the remaining labour services had become indispensable to them.

Legislation to prevent the rise of wages was passed as early as 1351 (the Statute of Labourers); but although historians dispute about the extent to which it was effective, there seems to be little doubt that broadly speaking, and within a few years, the law was ineffective in this respect. Lords of the manor might hold out against demands for higher wages and brave the resulting disputes with their villagers; but there were always the towns. Here higher wages could be secured: the answer to the refusal of commutation was migration to the towns, a movement which still further increased the shortage of agricultural labour. But there was an answer to that problem too: sheep farming in place of tillage. Eventually came the general rise of prices, but its lag had changed the course of history.

While change continued and modern capitalism developed slowly during the fifteenth century, no sudden upheaval like that occasioned by the Black Death took place. Then in the sixteenth and seventeenth centuries the tempo of change accelerated again. It is no coincidence that supplies of bullion, great in relation to existing stocks, were coming,

during this period, from the New World. Spain was the first country to be affected, and she was the first to establish a fleeting hegemony over western Europe. The hope of great riches stimulated the foundation of a vast empire in Central and South America, a development accompanied by the merciless oppression of the local inhabitants.

Spain, like Midas, had reason to regret the gift of gold. With a government blindly attempting to prevent the dissemination abroad of her bullion, which was mistaken for the vital form of wealth, Spain hastened the end of her profit inflation by engendering a rise of wages commensurate with the rise of prices. This process brought about a deflation of profits within a generation or so.

At the same time, the bullion found its way abroad, firstly to the Netherlands, which, for this reason and on account of its geographical position, rapidly became the commercial centre of the world. Great banking houses arose, promoting investment in many parts of western Europe; the Dutch began to manifest an independence, born of prosperity, which the oppression of larger nations failed to conquer.

England, experiencing the first substantial rise of prices since that due to the Black Death, put by her sombre mediaeval attire, and emerged in the brilliant colours of the Tudor epoch. But, later, the monarchy failed to acquire a proportion of the new funds sufficient for the good governance of the country. The honest, simple squires of the early Stuart Parliaments, whom history books are inclined to uphold as models of uprightness contrasted with a lax and spendthrift court, were guilty of misunderstanding fatally the financial realities: the guilt of ignorance, perhaps, but an important cause, usually underrated, of the disastrous Civil War.

England's internal troubles enabled France to assume the leadership of Europe, with the great Louis XIV scarcely held in check by Continental alliances formed around the House of Orange against him. While Cromwell ran the country as he pleased, imposing, through the major-generals, exactions such as Charles I had never dared to hope for, England's name had stood high in European affairs. Under Charles II came the increase in taxation made inevitable by the higher level of prices.

We must not suppose that the profit inflations, which gradually gave place in these countries to a general rise in all prices (including wages), were unmixed blessings. Spain, despite her empire, sank to the level of a second-rate power, possessing a peasantry living in depressed conditions. The common people of Holland lived very meagrely. France, where the few preserved the benefits to themselves, laid the foundations of the French Revolution. Even in England, during the allegedly spacious days of Queen Elizabeth, we find the problem of destitution appearing in an acute form.

The process of profit inflation is one of 'polarisation,' wherein a few enterprising people become richer, and the mass of the people become poorer. The historical examples of it which we can quote show a later reaction of an adverse sort. We may tend to the view, therefore, that

monetary fluctuations are adverse to general progress, but this view must relate to the fortuitous, uncontrolled and uncomprehended movements of the past. Now that we know what we are doing in monetary affairs, it may be different.

Eighteenth-century France had two inflationary episodes: John Law's System, and the assignats and mandats.

At the beginning and at the end of the eighteenth century with nearly seventy years and the Revolution in between to enable her to forget, France suffered from two series of irresponsible issues of paper money.

The first was due to the brilliant but unsound and unscrupulous Scot, John Law. Understanding as few men at that time did that the value of money depended upon the demand for it, and perceiving that the volume of trade was hampered by a lack of money, Law made the error of confounding wealth with money and of supposing that unlimited issues of paper money could create boundless prosperity.

Eloquent, persuasive, charming and supremely self-confident, Law succeeded in 1716 in obtaining from the Duke of Orleans, Regent of France letters-patent for the foundation of the *Banque Générale*. It was little surprising that the Duke, despite better advice from others urging caution, should yield to assurances of easy relief, for the monarchy was, as it had been for years, upon the verge of bankruptcy: at that time the *billets d'État*, unfunded obligations of the State, were offered for sale by their holders at 30 per cent to 40 per cent discount.

But the *Banque Générale* was only a beginning. Law had larger ideas. With some intention at first of issuing notes only for some ten times the *Banque's* authorised capital of 6,000,000 livres, Law nevertheless began without any regard to sound banking principles by rendering the State the considerable service of accepting these same *billets d'État* in payment for shares in the Bank, thereby easing the credit stringency of the Government and lowering the rate of interest: 75 per cent of a shareholder's subscription might be in *billets*; the rest was supposed to take the form of coin. Little coin was received. None the less the Bank's notes were payable in coin at sight on demand.

Within a year John Law's System had begun to develop further. In April 1717 the notes of the *Banque Générale* were accepted in payment of taxes, and, more surprising still, the offices of the Royal Treasury were commanded to redeem the notes in coin at par.

In September of the same year the first great step was taken to construct the inverted pyramid of credit. Taking over the monopoly concession of Louisiana, which meant broadly the entire basin of the Mississippi, Law founded the *Compagnie de la Louisiane ou d'Occident* and the *Compagnie du Canada*. Again, for the enormous capital of the former (100,000,000 livres), *billets d'État* were accepted in subscription.

In 1718 the *Banque Générale* became the *Banque Royale*, a liability of the State, but with Law, still wholly trusted by the Regent, as director; and the

Louisiana Company, taking over in 1718 and 1719 all the colonial monopolies of France, purchasing first the right of collection of the tobacco taxes, then the profits of the Mint and finally the *Fermes Générales*, and having changed its name to the *Compagnie des Indes*, stood towards the State in a relationship of creditor and debtor so intimate, so involved and on such a large scale that the realities of the situation could not be perceived.

Creating a forward market in the shares of the company by offering large premiums, Law not only kept up the illusion of dazzling success, and sold ever greater and greater quantities of shares (to a total of 5,000,000,000 livres), but also sent the value of the shares soaring away out of sight of reality altogether: they were sold at anything up to 4,000 per cent. It was the French counterpart of our South Sea Bubble.

Finally, the *Banque Royale* and the *Compagnie des Indes* were amalgamated in February 1720 and John Law's 'System' was complete; but the whole crazy structure was about to crash. Astonishing measures were taken to avert the inevitable collapse: the notes of the Bank became legal tender; payment of taxes in notes was accepted at 25 per cent discount; the shares could be cashed in notes at 9,000 livres for a 500-livre share; stocks of coin were seized; gold was demonetised; the possession of gold and silver, at first limited, was finally forbidden. Ever greater quantities of notes were issued until the total exceeded 3,000,000,000 livres. On 21 May 1720 the attempt was made to retreat from the precipice: shares of the Company were to be reduced gradually to half their face value. Confidence was destroyed; panic ensued: in a few days the System had disintegrated; Law, still protected by the Regent, still believing implicitly in his theories, escaped from Paris at the end of the year to die in obscure poverty in Venice nine years later.

The whole extraordinary episode (which was in all greatly more complicated than the foregoing brief account suggests) had taken place in little over four years: the very speed of the inflation limited its powers for harm. The notes and the shares were worthless; the State was again on the verge of bankruptcy; thousands were ruined; some of the currency had fled abroad in obedience to Gresham's Law. Of the effect on prices throughout France, the information is not satisfactory: if, as appears to be the case, prices were influenced remarkably little, except for some ridiculously high prices paid mostly for luxuries in Paris, the explanation must lie in the fact that the wild gambling was confined to a small section of the wealthy in the capital. It had been as though in our days of insanity in 1720 the South Sea Company had taken over the Bank of England.

The financial circumstances preceding the monetary excesses of the French Revolution were not far different from those of the Regency. The pre-revolutionary Government had long been in the direst straits for money. The Assembly attempted, in 1789, to solve the inherited difficulties by an issue of bonds, termed *assignats*, bearing interest at 5 per cent, and secured by the land taken in the name of the nation from the

privileged classes; these bonds were to be cancelled as they were handed back to the Government in exchange for land; and if a Government creditor, to whom they were paid, did not want land, he could sell the bonds, it was thought, to someone else who did require it.

The first issue was for the amount of 400,000,000 livres (25 livres = £1). In 1790, however, the rate of interest was reduced to 3 per cent, but the *assignats* were made legal tender. Born as securities, they grew into money. They began to circulate, at a discount of 5 per cent, which may be explained by the fact that they were in denominations too large for the purposes of ordinary business. A very considerable stimulation of enterprise resulted.

But the State's requirements could not be solved so simply. The limit to the total amount issued was raised in 1790 to 1,200,000,000 livres. Gold and silver began to leave the country, or to find their way into secret hoards, and, at the same time, the real depreciation of the *assignats* began. Their number did not at first advance outrageously: another 600,000,000 were added in 1791; the value of the paper livre moved around three-quarters of the old livre. Early in 1792 came war, however, and considerable further issues: the value fell to little over half (partly by reason of speculation), but early military success and the determination of an extremist Government brought the value back to three-quarters by the end of the year, despite a further issue of 500,000,000 livres. The full account of the issues of *assignats* is better seen from the following table:¹

TABLE I
ASSIGNATS, 1790-5

Periods	Notes in millions of livres		Percentage of value of old livre	
	Issued	In circulation	By local tables	By Treasury figures
1790-91	1,860	1,490	86	77
Jan.-May 1792 ...	2,200	1,660	72	58
June-Dec. 1792 ...	2,750	2,250	75	72
Jan.-Aug. 1793 ...	4,050	4,050	39	22
Sept. 1793-July 1794 ...	8,450	7,200	41	34
Aug. 1794-Dec. 1795 ...	²	19,700	0.8	0.8

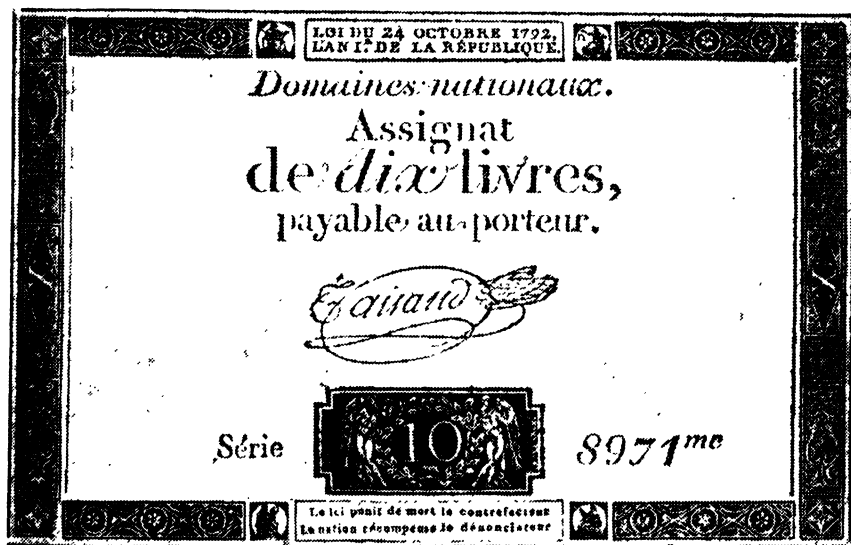
The violent issues of the later years were made at a time when the dislocation caused by the earlier issue was already having its worst effects: the real yield of taxation was negligible; unemployment had appeared, and therewith extreme misery on account of the soaring price-level; the aggregate value of the total paper issue was falling fast; and a large quantity of forgeries was in circulation.

¹ Quoted by J. L. Laughlin, *Money, Credit and Prices* (1931), vol. II, p. 175 (S. E. Harris, *The Assignats* (1930)).

² Various estimated from 29,000 to 45,500 million livres.

ILLUSTRATION I: THREE *ASSIGNAT* NOTES

(i)



(ii)



(iii)

Of the three *assignat* notes shown here,¹ it is the first for fifteen sols (or sous), which is interesting. On 21 September 1792 the Convention had abolished the monarchy: the King was in prison, from which he was to be taken to the guillotine on 21 January 1793. The law authorising this issue of *assignats* was passed, as may be seen from the panel in the top left-hand corner, between these dates. Thus the panel in the top right-hand corner quite naturally states the year of issue as the first year of the Republic. But the fleur-de-lis are still reproduced; and the slogan of the brief and uneasy interval of constitutional monarchy is still used: the Nation—the Law—the King. The two circular seals impressed on the lower part of the note, which can hardly be distinguished in the reproduction above, are also contradictory: on the left-hand one (which is not clear) surrounding an angelic figure of Liberty at an altar (?) occur the words *REGNE DE LA LOI*; and in very small letters underneath *L'AN 4 DE LA LIBERTE*. Presumably the fourth year of Liberty had begun on 14 July 1792, the third anniversary of the fall of the Bastille. But the right-hand seal consists of a head of the King surrounded by the words, *LOUIS XVI ROI DES FRANÇOIS*, and in very small letters what seems to be *GATTEAUX*. This first note must be one of the few examples of the head of a monarch appearing on the notes of a republic!

On the note for ten livres, however, although this was issued under the same law, the image and emblems of monarchy do not appear. Perhaps it was issued not until after the death of the King. The two oval seals contain no words but only symbolic figures, in the left-hand one of the State (?) with a mob cap on a pole (?) and *fascies*, and in the right-hand seal a figure of Ceres or Plenty.

The third note, like the first, contains the word *GATTEAUX*, which was presumably the name of the engraver. And its left-hand seal, to be discerned with great difficulty, is also the same as that of the first note. The right-hand seal is a standing figure of Justice, with no words.

¹ The author is greatly indebted to Captain Fitzgerald, late of the Intelligence Corps, whose generous gift the fine specimens were which are reproduced above.

The earliest issues of *assignats*, thought to be largely in the hands of Royalists, were repudiated. At the end of 1795, the Government tried to levy a forced loan, in subscription to which *assignats* were to be accepted at 1 per cent of the face value; that the current value was less than this is shown by the fact that no coin was subscribed to the loan. *Assignats* were also to be made exchangeable for *mandats territoriaux* at the rate of 30 livres *assignat* to 1 livre *mandat*. But *mandats* proper, which were to be certificates immediately exchangeable into land, were never issued. Instead, *promesses de mandat* were issued, but these, which differed in no essential from the *assignats*, were never passed freely in circulation: soon after their issue, they circulated with difficulty at about 5 per cent of face value, and in 1797 were accepted by the Government, in subscription to a loan, at 1 per cent. In that year, too, the legal tender status was taken away from both paper issues, and a scale was prepared for the settlement of private debts according to the fraction of value remaining to the *assignats* and *mandats* at the time when the particular contract was made.

The whole misguided affair was a tragic example of inflation at its worst. The connection between the paper and land was very attenuated, for it was quite impossible within a short time to sell land on a large scale for bullion, else its value would have collapsed ruinously. The paper money was issued so fast that it never had a chance of being readily acceptable; so its value slumped, and it had to be issued all the faster. A progressive decline of this kind must become farcical within a short time.

The adoption of the Gold Standard in the nineteenth century brought falling prices.

Not all of the salient examples of monetary fluctuations in recent centuries have been cases of inflation. In Chapters X and XII we have mentioned the adoption of the Gold Standard by the leading countries which copied the decisive action of Germany in 1872. This step followed from ideas which had been current for some years of equating in some manner the various national currency units with the object of eliminating exchange fluctuations. In 1865 France had formed the bimetallic Latin Monetary Union comprising besides herself Belgium, Switzerland and Italy; but entertaining hopes of a much wider union, France sent invitations in 1867 to an international monetary conference in Paris. This was attended by representatives of eighteen leading European nations and of the United States. The conference was consultative in nature, and only one of its recommendations concerns us here, namely, that all countries should adopt the Gold Standard. The representatives of Prussia, the leading country having a Silver Standard, and those of France voted for the motion: Holland, which had a Silver Standard, was the only dissident.

The German Empire, newly formed after the Franco-Prussian War, was the first country to put into effect this recommendation of the conference. As other countries took similar action there was something of a mild scramble for gold: the increased demand at a time when the supply was not plentiful exerted deflationary pressure on prices. We are accustomed

to thinking of the Victorian era as one of prosperity, but English manufacturers at the time termed the period from 1874 to 1896 "the great depression" (an expression with other associations for the people of to-day!) and complained bitterly of German competition. Throughout that period, there was never unemployment upon the tragic scale to which we have become accustomed, and output was not considerably below the potential, but there was a deflation of profits, made all the more painful because the returns to entrepreneurs had been buoyant in the two previous decades. It is significant that German competition was made the villain of the piece: full comprehension of a deflationary situation belongs almost entirely to the years since World War I.

To show the trend of prices and of unemployment in perspective it is necessary to give a large number of years before and afterwards: thus the following table¹ covers the years 1851 to 1907.

TABLE II
WHOLESALE PRICES AND UNEMPLOYMENT IN GREAT BRITAIN,
1851-1907

Year	Index number of wholesale prices, 1900 = 100	Percentage unemployed	Year	Index number of wholesale prices, 1900 = 100	Percentage unemployed
1851	110	3.9	1880	117	5.5
1852	108	6.0	1881	113	3.5
1853	123	1.7	1882	112	2.3
1854	138	2.9	1883	109	2.6
1855	133	5.4	1884	101	8.1
1856	137	4.7	1885	96	9.3
1857	142	6.0	1886	92	10.2
1858	127	11.9	1887	91	7.6
1859	128	3.8	1888	93	4.9
1860	132	1.9	1889	96	2.1
1861	131	5.2	1890	96	2.1
1862	135	8.4	1891	96	3.5
1863	137	6.0	1892	91	6.3
1864	140	2.7	1893	91	7.5
1865	135	2.1	1894	84	6.9
1866	136	3.3	1895	83	5.8
1867	133	7.4	1896	81	3.3
1868	132	7.9	1897	83	3.3
1869	131	6.7	1898	85	2.8
1870	128	3.9	1899	91	2.0
1871	133	1.6	1900	100	2.5
1872	145	0.9	1901	93	3.3
1873	148	1.2	1902	92	4.0
1874	136	1.7	1903	92	4.7
1875	128	2.4	1904	93	6.0
1876	127	3.7	1905	96	5.0
1877	125	4.7	1906	103	3.6
1878	116	6.8	1907	107	3.7
1879	110	11.4			

Below, the whole period has been split into three parts and the average wholesale price index is shown for each. Rather more significant are the number of cases in which the index showed an increase or decrease com-

¹ Taken from *Encyclopaedia Britannica*, Fourteenth ed., vol. X, pp. 720-21, whose figures are based on W. T. Layton, *An Introduction to the Study of Prices* (1920). Lord Layton used for the index number of wholesale prices Jevons's index up to 1865 and Sauerbeck's after that date.

pared with the year preceding. The averages of unemployment are also shown.

TABLE III

AVERAGE WHOLESALE PRICES, YEARS OF INCREASE AND DECREASE, AND UNEMPLOYMENT, IN GREAT BRITAIN, BY PERIODS, 1851-1907

Periods	Index number of wholesale prices, 1900 = 100	Years of increase	Years of. decrease	Percentage unemployed
1851-73	132	14	9	4.6
1874-96	104	3	17	5.4
1897-1907	94	8	2	3.7

None the less it must not be imagined that Great Britain was 'in a bad way' in the period 1874 to 1896. The complaints emanated principally from business men and their families; the mass of the people, even making allowance for the slightly heavier unemployment, were enjoying in this time a rapidly rising standard of living.

In the World Wars inflation was great but not enormous in Great Britain.

Let us now observe some of the facts indicating inflation in various countries during the two World Wars. We may take certain statistics for Great Britain first.

World War I.

TABLE IV
UNITED KINGDOM NOTE CIRCULATION, 1913-24¹

June qr.	England and Wales			Scotland ⁴	Ireland ⁴	United Kingdom total
	Bank of England ²	Currency notes	Total ³ England and Wales	Chartered and Joint- Stock Banks	Bank of Ireland and Joint- Stock Banks	
	Thousand £					
1913	28,596	—	28,749	7,703	8,501	44,953
1914	28,898	—	29,002	7,913	8,353	45,268
1915	34,064	43,905	78,081	10,567	13,287	101,935
1916	34,706	117,034	151,867	13,999	17,517	183,383
1917	38,743	156,047	194,937	16,655	20,539	232,131
1918	50,193	242,293	292,657	22,170	27,320	342,147
1919	77,203	345,018	422,393	27,439	31,709	481,541
1920	103,057	346,767	449,994	29,395	27,643	507,032
1921	109,082	334,481	443,565	28,113	21,080	492,758
1922	102,483	300,606	403,089	24,439	18,428	445,956
1923	101,302	286,891	388,193	23,363	17,367	428,923
1924	103,147	289,566	392,713	22,503	16,689	431,905

¹ The Economist Intelligence Unit, 1948.

² Excluding Bank of England notes in the Currency Notes Redemption Account prior to 1929 and in the Banking Account of the Bank of England throughout.

³ Including issues of country banks.

⁴ The fiduciary issues of the Banks of Scotland amount to £2,676,350, and that of the banks in Ireland to £6,354,494. Issues beyond these amounts are covered by Bank of England or currency notes.

TABLE V
BANK DEPOSITS AND PRICES, GREAT BRITAIN, 1913-24

	Deposits at Joint-Stock Banks		Wholesale price index (Economist) 1913 = 100	Cost of living index (Min. of Labour) July 1914 = 100
	(£000,000) (approx.) ¹	Index		
1913	800	100	100	—
1914	900	112	99 ²	100 ³
1915	1,000	125	120	123
1916	1,150	144	156	146
1917	1,360	170	198	176
1918	1,590	199	216	203
1919	1,880	235	226	215
1920	1,970	246	273	249
1921	1,980	247	169	226
1922	1,820	227	146	183
1923	1,810	226	147	174
1924	—	—	159	175

In these two tables the most obvious point is, of course, that all four sets of statistics behave in the same way: they all point to inflation, most strikingly shown, indeed, by the note circulation figures which advanced more than tenfold whereas the three indices increased about two and a half or two and three-quarter times.

The chief reasons for the greater increase in the note circulation, especially by comparison with bank deposits, were two in number: first, the inflation caused gold coins to disappear from circulation, so that part of the note-issue may be regarded as substitution for coin; second, greatly enhanced wages brought a larger proportion of the national income into the hands of wage-earners, the bulk of whom did not have bank accounts. The diminution of income in kind, as received for example by domestic servants, was a contributory element in the second cause.

It would have been virtually impossible to avoid the inflation, and it would have been undesirable indeed to try to do so entirely; yet it remains true that the inflationary growths could have been and should have been controlled, whereas the policy of the Government permitted these inflationary tendencies little short of perfect freedom to increase.

The Government was undoubtedly wise in relying heavily, as it did, upon taxation and upon borrowing in order to finance the prodigious war effort. But it also paid out Treasury notes to defray its expenses, and those notes constituted the basis of inflation, as they were also an element in it. The greater volume of 'cash' thus provided enabled the commercial banks, following 'sound, conservative banking principles' as ever, to increase the volume of deposits almost without limit. In one of these two forms of

¹ End of year. From J. H. Laughlin, *Money, Credit and Prices* (1931), vol. II, p. 531 (graph).

² Second half of year.

³ July.

money, deposits or notes, the greater incomes were received which in turn were paid out as expenditure by their recipients or handed as savings subscribed to War Loan bonds to the Government, which spent the money promptly. It was, of course, these streams of expenditure which raised the level of prices as the two price indices show.

The post-war depression beginning at the end of 1920 shows markedly in the two indices of prices, slightly in the volume of notes, and slowly in that of bank deposits: the relative insensitivity of the two volumes of money is normal; it is explained by the greater fall in the velocity of circulation which is always the more volatile element in the stream of money.

It may be observed with some slight surprise perhaps that the cost of living index at first narrowly leads the wholesale price index. Too much significance should not be attached to the fact, for statistical measurements of that time were, as, indeed, they remain, insufficiently exact to indicate significant marginal changes: if the *Statist's* wholesale price index had been given instead of *The Economist's*, the wholesale price index would have shown as an easy leader up to and including 1920. Yet it is normal, of course, for wholesale prices to be more volatile than the retail prices which constitute a cost of living index. It has been suggested that disproportionately large spending by poor people, a phenomenon related to labour shortage, may have accounted for the relative increase in retail prices. This may have been a reason, but if so it was not a large matter. Precautionary price-raising by retailers may also have had something to do with the unaccustomed movement, as may the remarkable strength of sterling on the foreign exchanges in the early months of the war.

In any case, the normal relationship, with the wholesale price index leading, was restored in 1916, and from then its movement upwards, and later downwards, was considerably the greater; which is, of course, normal.

The rise of prices naturally excited comment and disapproval; official propaganda (with slight truth) attributed the rise to a scarcity of commodities, and, later, to profiteering; the second excuse was quite unfounded, for it was the Government's own financial policy which had created the profiteers by raising prices; but, partly because the animus against profiteers was so great, the Government gradually introduced a system of maximum prices; this was exceedingly dangerous, for it threatened to cause a falling-off of supplies, since traders' profits were encroached upon; and it occasioned discontent because people were left with money which they could not spend as they wanted, since traders, bereft of the normal method of 'protecting' their stocks, namely, of increasing prices, found their stocks of many important goods exhausted. To cure the former trouble, where necessities were in question, the Government adopted numerous devices, chief among which were propaganda and direct participation in economic affairs. To cure the unspendable money trouble, the Government adopted rationing; from the public's point of view, this at least ensured that some should not get an inequitably large share of necessary and desirable goods which everyone was prepared to pay for

it he could find them. If the Government had had rationing in view all the time, the half-way house of maximum prices might have been excusable and even praiseworthy; for the dislocation, occasioned entirely, it appeared, in response to popular feeling, was a necessary prelude to the bitter pill of the ration card; the country would have accepted rationing with great reluctance if it had not seemed to offer the solution of other difficulties. Rationing was assuredly the best policy.

The continuation of inflation after the Armistice is clearly visible in the price figures, as are the effects of the deflationary policy begun in 1920.

World War II.

TABLE VI
CERTAIN MONEY AND PRICE STATISTICS OF GREAT BRITAIN, 1935-48¹

Year	Total notes and coin in circulation ² £000,000	Current accounts at London clearing banks ² £000,000	Wholesale price index ³ 1938 = 100	Cost of living index ⁴ 1 Sep. 1939 = 100
1935	548	1,030	87.7	92
1936	563	1,172	93.0	95
1937	622	1,217	107.2	99
1938	632	1,231	100.0	101
1939	635	1,204	101.4	102
1940	712	1,392	134.6	119
1941	801	1,809	150.5	128
1942	975	2,059	157.1	129
1943	1,177	2,387	160.4	128
1944	1,345	2,702	163.7	130
1945	1,487	3,068	166.7	131
1946	1,621	3,277	172.7	131
1947	1,682	3,629	189.1	131 ⁵
1948	1,534	3,816	216.2	144 ⁶

Comparable figures for World War II together with those of a few years before and afterwards show some similarities to and some differences from the figures given in Tables IV and V. A similar agreement of the four columns of figures for World War II is to be observed: there was brought about, wittingly this time, a process of inflation designed to produce maximum output but controlled so as to enable the Government to secure for the purposes of the war all available output except the minimum necessary for the maintenance of civilian existence.

There can be no doubt that the financial side of World War II in Great Britain was arranged and controlled with the utmost skill. To produce the

¹ *Annual Abstract of Statistics*, No. 84, 1935-46, and *Monthly Digest of Statistics*, No. 38, February 1949.

² Quarter ended 30 June.

³ Board of Trade.

⁴ Ministry of Labour and National Service.

⁵ 17 June 1947: index thereafter discontinued.

⁶ Approximately: 15 June 1948—the figure in the interim index of retail prices, namely 110, multiplied by 131/100.

greatest war effort in a country which is predominantly capitalist in its economy and democratic in its political forms requires, indeed, not only financial skill but an all-pervasive and all-coercive economic policy which nevertheless receives the hearty support of the people in its stringent compulsion. At least those persons whose feelings colour and determine the behaviour of all—and such bell-wethers may be numerous in our society—must be staunch supporters of Government policy. We may say in retrospect that this political condition was fulfilled, at least from the spring of 1940 onwards.

The necessary economic policy may be summarised as five financial elements and two further components which are not financial in a narrow sense: first, controlled inflation; second, the maximum of taxation bearable; third, borrowing by the Government so great as to enable it (together with its buying power derived from inflation and taxation) to command all resources except those devoted to the production of the civilian minimum; fourth, a pervasive system of maximum prices—in the maintenance of which popular support is absolutely essential if black markets are not to impair the war effort, for human resources are not available to repress a vigorous black-market movement; fifth, the control of capital issues; also, as a sixth strand in the texture of policy, rationing, and that means rationing of virtually everything, for partial rationing leads to the production of unrationed goods, just as a partial system of maximum prices leads to the output of goods whose prices are not controlled; and seventh, finally, the direct allocation in accordance with military priorities of key resources.¹

All of these elements were present in our policy, and they were woven together with a skill and delicacy which may well serve as a criterion for all the future time throughout which our sort of society endures. It was very evident that our war effort by far surpassed even that which we made in World War I, and the second exertion was of the longer duration; moreover, except for the mighty support of the United States, almost every other attendant condition was more unfavourable. Yet, as all the figures combine to show, our inflation up to 1945 was kept within strict control, and the contrast with World War I is impressive.

It would be improper, however, to be dazzled by our own financial virtue: to some extent we learnt by the mistakes which we made in World War I; yet there is something more to be said. Between the two World Wars our understanding of the economic system advanced: we entered the second struggle intellectually mobilised, and perhaps better prepared in that way than any other capitalist country. The work of Keynes applied, of course, to the problem of the war effort, but the patient work of many enquirers less eminent contributed to a formidable expertise.

Leaving the great issues of financial and economic efficiency as elements in military endeavour, we may examine in more detail some points emerging from the statistics of Table VI. That the expansion in current accounts was greater than that of the circulation in World War II, whereas

¹ It may well be correct to consider labour as the most important key resource of all.

it was the other way round in World War I, is to be explained mainly by the larger number of income receivers keeping current accounts. The relationship of the two price indices was normal enough at the beginning of the war, but the divergence became marked as the war continued, and still more abnormal afterwards. This is to be explained, of course, by our present policy of suppressing inflation and thereby perpetuating its evil effects: food subsidies and controls account for the extraordinarily low cost of living figures in a time of extreme shortage of supply in relation to demand.

The continuation of inflation after the war is very marked. And up to the last date in the table we have not experienced our '1921,' of course. There is no need when the relapse eventually comes why it should lead to prolonged depression; none the less the present continuation of inflation is not healthy, and the process of readjustment will be the harder and the more painful because of it.

The experiences of other countries in the World Wars were varied.

The wartime inflations which different nations have undergone may be classified as large, enormous and catastrophic; by comparison the 'large' inflations were relatively mild affairs and correspond approximately with the cases in which pre-war gold values of the currency unit could be restored exactly or approximately afterwards; the 'enormous' ones entailed a post-war price-level some five to ten times the pre-war level and required devaluation of the currency unit; the catastrophic cases were those involving repudiation of the old currency altogether and the issuing of a new one.

In this classification the United States falls into the absolutely-large-but-relatively-mild group for both wars; Great Britain belonged to this group for World War I and should prove to do so for World War II, but that matter is now in doubt because of post-war inflation; France belongs in the enormous group both times; Germany and Hungary may serve as examples of the catastrophic cases for World Wars I and II respectively.

In the figures of the United States, we observe increases of bank deposits and currency similar to the British ones; but there is one great difference between the monetary circumstances of the two countries during this period, namely, that the pound did and the dollar did not leave the Gold Standard. Gold was imported into the United States from belligerent countries in unprecedented quantities: from a figure of \$1,290 million in 1913, her stocks had risen to \$2,658 million at the end of World War I, and they continued to increase rapidly, reaching \$4,090 million in 1924. The effect of shipments on this scale was similar in tendency (though not in extent) to demonetisation of gold by the other leading countries: we may see the effect upon the purchasing power of gold from the two United States price indices quoted: by 1920 it was halved.

Rapid recovery after the depression of 1921 is shown clearly in the

United States figures; there is a contrast here with the experience of Great Britain.

TABLE VII
BANK DEPOSITS AND PRICES IN THE UNITED STATES, 1914-24

Year	Demand deposits adjusted of U.S. banks and currency outside banks ¹ \$000,000	Wholesale price index ² 1913 = 100	Cost of living index ² 1913 = 100
1914	11,615	98	103
1915	11,403	101	105
1916	13,849	127	118
1917	15,777	177	142
1918	18,141	194	174
1919	21,217	206	199
1920	23,721	226	200
1921	20,790	147	174
1922	21,391	149	170
1923	22,697	154	173
1924	23,062	150	173

It is better to take the note circulation rather than the volume of bank deposits for France (or for Germany) as the former was the chief form of payment. The epithet, enormous, may be considered justified both in relation to the increase in the note circulation and in relation to the increases in the price indices. In the years after the war the national

TABLE VIII
CIRCULATION AND PRICES IN FRANCE, 1913-24

Year	Approximate circulation ³ milliards of francs	Wholesale price index ⁴ 1913 = 100	Cost of living index (Paris) ⁵ 1914 = 100
1913	6	100	—
1914	10.5	102	100
1915	13	140	—
1916	17	188	—
1917	22.5	262	—
1918	31	339	—
1919	37.5	356	238 ⁶
1920	38	509	342
1921	36.5	345	309
1922	37	327	296
1923	38	419	335
1924	41	489	569

¹ From W. Nelson Peach and Walter Krause, *Basic Data of the American Economy* (1948), Table 37.

² U.S. Bureau of Labor Statistics.

³ J. L. Laughlin, *Money, Credit and Prices* (1931), vol. II, p. 565 (graph).

⁴ *Encyclopaedia Britannica*, Fourteenth ed., vol. 18, p. 474.

⁵ The Economist Intelligence Unit, 1948.

⁶ First half of year.

budget was chronically underbalanced partly by reason of inflation itself and partly because no French political leader could afford publicly to admit that reparations to the full amount fixed would not be forthcoming from Germany. This budget deficit was the cause of further inflation as well as the effect of earlier inflation. Thus we may regard the deficit as the cause of the fall of the franc also; for with the continued expansion of the circulation the budget deficits year by year promoted the higher income and expenditure which caused the franc to go on falling in purchasing power and on the foreign exchanges. Part of the explanation of the fall in the franc, lying so to speak beneath the budget deficits and the expanding circulation, is something more fundamental. Whilst it is in general debatable how great the maximum National Debt may be that a particular country can support, it cannot be doubted that France's debt, having risen from 34 milliard francs in 1914 to 286 milliard in 1920, was too great for her to contend with. Frenchmen are hardworking compared with ourselves, but they are not, and in that time were not, so good at paying taxes, certainly not direct taxes on income. Furthermore, France had suffered severe devastation in World War I in her most highly industrialised area. Without investigating the matter deeply we may conclude that France's internal debt had become too large, so that the necessary taxes could not be collected to pay interest upon it. The method of escape was general inflation raising the monetary income of the country and depreciating the real value and burden of the debt.

TABLE IX
CIRCULATION AND PRICES IN GERMANY, 1913-24

Year	Circulation ¹ 000,000,000 mks.	Cost of living index ² 1914 = 100
1913	3	—
1914	5	100
1915	7	—
1916	8	—
1917	12	—
1918	22	—
1919	36	—
1920	69	1,065
1921	114	1,250
1922	1,280	5,392
1923	496,507,425,000	3,765,100
1924	—	126

The extreme example of an excessive war burden may be seen in the case of Germany. Similar conditions prevailed in other defeated countries. Germany's 1914 debt was small, 5 milliard marks; by 1920, it was 220 milliard marks; this was nominally less than the French one at the pre-war

¹ J. L. Laughlin, *Money, Credit and Prices* (1931), vol. II, pp. 598-9.

² The Economist Intelligence Unit, 1948.

rate of exchange, and much less at the current rates. But Germany was completely exhausted and impoverished by 1920, not only on paper, but in fact. She had no hope of meeting her internal debt, and no chance at all of paying reparation on the scale demanded. She fell back desperately upon the last resource of a 'bankrupt' state, inflation. The figures of note-issue suffice to show the extent to which she took to economic drugs.

This is the famous German 'hyperinflation,' of course. In the latter stages of this fiscal insanity, bank deposits also swelled up fantastically and, indeed, surpassed the astronomical total of notes; but the former was a result of the printing of notes.

In the latter stages, as the mark ran away towards zero on the foreign exchange markets, business in general became intolerably difficult: prices were fixed either outright in foreign currencies, or in terms of marks calculated by converting a dollar price into marks at the foreign exchange rate of the moment; in particular, wages were fixed in this way. This farce could not go on for ever: finally, in 1924, a new reichsmark, equal to the old gold mark of pre-war days, was introduced, and the exchange equivalent was fixed at 1 billion depreciated paper marks to 1 reichsmark;¹ the latter was to be based on gold, a fact which imparted confidence; but it was the limitation of the new currency, not the gold, which gave it stability.

TABLE X
BANK DEPOSITS AND PRICES IN THE UNITED STATES, 1935-48²

Year	Demand deposits adjusted of U.S. banks and currency outside banks ³ \$000,000	Wholesale price index ⁴ 1926 = 100	Cost of living index ⁴ 1935-39 = 100
1935	25,216	80.0	98.1
1936	29,002	80.8	99.1
1937	30,687	86.3	102.7
1938	29,730	78.6	100.8
1939	33,360	77.1	99.4
1940	38,661	78.6	100.2
1941	45,521	87.3	105.2
1942	52,806	98.8	116.5
1943	71,853	103.1	123.6
1944	80,946	104.0	125.5
1945	94,150	105.8	128.4
1946	105,992	121.1	139.3
1947	108,433	152.1 ⁵	159.2 ⁵
1948	108,335 ⁵	165.0 ⁵	171.2 ⁵

For the United States we may make the most important points of comparison and contrast briefly. As for World War I, there is general agreement in the columns of figures. But the absence of a post-war depression,

¹ The process was effected via the introduction of the rentenmark, but, in essentials, the matter was as stated.

² From W. Nelson Peach and Walter Krause, *Basic Data of the American Economy* (1948), Tables 37, 73 and 74. ³ June figures. ⁴ Bureau of Labor Statistics.

⁵ *Federal Reserve Bulletin*, March 1949.

as in the case of Great Britain, is very noticeable. In contrast with Great Britain, however, the artificial holding down of the cost of living has been discontinued and the figures for 1947 and 1948 show this. The result may be inflationary, indeed, it certainly is, but at least America is producing the things most urgently needed (as well as demanded) by her own people and by the rest of the world, and producing them to the utmost of her great capacity. This is a healthier condition than the suppressed inflation continuing in Great Britain: from an economic standpoint the American situation is sounder. That contention does not imply that there never arise circumstances in which it is right to suppress inflation: if the rise in the cost of living would be so great in the absence of control that the poor starved, evidently a policy of *laissez-faire* would be criminal from the wider sociological viewpoint and grossly inefficient from the narrower economic point of view. But a higher cost of living might be permitted in Great Britain which would lower the consumption of beer and tobacco and decrease expenditure on football pools without injuring the morale of producers who are, like non-producers, beneficiaries of American grants in aid.

TABLE XI
CIRCULATION AND PRICES IN FRANCE, 1935-48

Year	Note circulation 000,000,000 frs. end December ¹	Wholesale price index 1938 = 100 ²	Cost of living index (Cost of food in Paris) 1937 = 100 ²
1935	81	52	—
1936	89	63	—
1937	94	89	100
1938	111	100	116
1939	151	105	125
1940	218	139	149
1941	270	171	172
1942	383	201	201
1943	500	234	259
1944	573	265	319
1945	570	375	436
1946	722	648	746
1947	921	989	1,207
1948	988	1,691 ³	1,089 ³

The French figures show exactly what we should expect: recovery from the great depression, wartime inflation and continuing inflation. This inflation is certainly to be classified as enormous, but, unless fresh misfortune overtakes France, it does not appear at present that the depreciation of the franc will reach the extent of being catastrophic. Indeed, the remarkably prudent, cautious and skilful regime of M. Queuille appears to have 'saved the franc' or to have saved at least what remained of its purchasing power when he took office in September 1948.

¹ *Federal Reserve Bulletin*, March 1949.

² *The Economist Intelligence Unit*, 1948.

³ June

We should feel no surprise that inflation has gone on in France since the end of World War II. The monetary difficulties resulting from military occupation and warfare were wellnigh insuperable, particularly since they confronted the successive governments in a time of political and social unrest exploited by a powerful Communist Party intent upon creating disorder. That France is emerging from her political and economic troubles so soon, so rapidly and so successfully is the matter which should occasion surprise to us—and congratulation to our nearest Continental neighbours. But it would be unwise to become complacent in respect of France's financial stability: a political crisis leading to a Government lacking the courage of M. Queuille's could undo rapidly the progress made towards stability.

TABLE XII
CIRCULATION AND PRICES IN HUNGARY, 1935-48

Year	Note circulation 000,000 pengő	Wholesale price index ⁵ 1937 = 100	Cost of living index (Budapest) ⁵ 1937 = 100
1935	---	90	89
1936	---	93	94
1937	466 ¹	100	100
1938	---	101	101
1939	1,000 (Sept.) ²	100	99
1940	---	116	107
1941	---	142	127
1942	---	173	148
1943	---	236	177
1944	12,000 (Jan.) ³	317	219
"Index of prices"¹ 26 Aug. 1939 = 100			
1945	33,600,000 (July) ³		105 (July)
	765,000,000 (Dec.) ³		41,478 (Dec.)
1946			862,317,000,000 (15 June)
6,277,000,000,000,000,000 (June) ³		399,623,000,000,000,000,000,000,000 (30 June)	
	000,000 forint 244 (end Aug.) ¹ 740 (15 Dec.) ¹		
1947	1,992 (Dec.) ⁴	489	436
1948	2,817 (Dec.) ⁴	562	450

The hyperinflation occasioned in Hungary by World War II follows closely the famous German prototype of the years succeeding World War I. But the Hungarian epidemic of printing was the more violent. Hungary was severely devastated by the bitter fighting which took place there in the latter stages of the war; and such disorder of all sorts prevailed that the printing of notes was the only source of revenue available to the Govern-

¹ By courtesy of the Hungarian Legation, Washington, D.C.

² *Keessing's Contemporary Archives*, 7596 A.

³ *The Economist*, 24 August 1946, p. 307.

⁴ *Federal Reserve Bulletins*. ⁵ *The Economist Intelligence Unit*, 1948.

ment. We have only to observe the figure of the circulation in June 1946, 6,277,000,000,000,000,000,000,000 pengö, to realise that the currency had become by then practically valueless. The fantastic index number of 30 June 1946 is still more striking testimony in the same sense. Adequate records of prices could be gathered only with difficulty, so that both the regular wholesale and the regular cost of living indices are available neither for 1945 nor for 1946.

A new currency unit was introduced in August 1946, the forint. This sudden return to monetary sanity was facilitated by the return of the pre-war gold reserve, which, taken away by the Germans, was later discovered and restored by the American military authorities. The introduction of the forint was accompanied by somewhat arbitrary but apparently skilful price-fixing. The index numbers of 1947 and 1948 reflect the realisation on the part of the Hungarian authorities of the poverty-stricken condition of the country.

The exchange rate fixed between the forint and the paper pengö speaks for itself; it was: 1 forint

= 400,000 quadrillion (400,000,000,000,000,000,000,000,000) pengös! Similarly, on the last day of the inflation, 1.4 quintillion paper pengös equalled 1 old gold pengö.

But the early 1930's were a period of almost unrelieved deflation.

Having looked at some important examples of inflation, especially in relation to the two World Wars, we should consider briefly the most important instance which there has been of deflation, namely that of the great depression.

TABLE XIII

CERTAIN MONETARY STATISTICS OF THE UNITED KINGDOM,
1925-34

Year	Total notes in circulation ¹ (June quarter) £000,000	Current accounts at London clearing banks ¹ (monthly averages) £000,000	Net national income ² £000,000	Consumption by persons ² £000,000	Wholesale price index ⁴ 1913=100	Cost of living index ⁵ July 1914=100
1925	425	923	4,357	3,386	154	176
1926	419	921	4,173	3,443	140	172
1927	414	932	4,359	3,515	138½	167
1928	410	954	4,339	3,547	135	166
1929	393	940	4,384	3,742 ³	127	164
1930	391	921	4,318	3,670	107	158
1931	385	895	3,889	3,554	89	147½
1932	388	867	3,844	3,482	86	144
1933	404	978	3,962	3,484	86	140
1934	409	953	4,238	3,601	90½	141

¹ The Economist Intelligence Unit, 1948.

² Adapted from Colin Clark, *National Income and Outlay* (1937), Tables 37, 39 and 112.

³ Partly estimated.

⁴ The Economist.

⁵ Ministry of Labour.

TABLE XIV
CERTAIN MONETARY STATISTICS OF THE UNITED STATES, 1925-35

Year	Demand deposits adjusted of U.S. banks and currency outside banks ¹ \$000,000	National income ² \$000,000,000	Consumer expendi- tures ² \$000,000,000	Wholesale price index ¹ 1926 = 100	Cost of living index ¹ 1935-39 = 100
1925	24,949	—	—	103·5	125·4
1926	25,601	—	—	100·0	126·4
1927	25,539	—	—	95·4	124·0
1928	25,881	—	—	96·7	122·6
1929	26,179	87·4	78·8	95·3	122·5
1930	25,075	75·0	70·8	86·4	119·4
1931	23,483	58·9	61·2	73·0	108·7
1932	20,241	41·7	49·2	64·8	97·6
1933	19,172	39·6	46·3	65·9	92·4
1934	21,353	48·6	51·9	74·9	95·7
1935	25,216	56·8	56·2	80·0	98·1

The figures for the United Kingdom are grim enough; those for the United States are worse. In our case both the circulation and the current accounts were remarkably unresponsive to the worst depression of all time: their variations might be described suitably as having been insignificant; which emphasises once more the well known fact that it is the velocity of circulation, and not the volume of money, which supplies the great variation in the aggregate turnover as between good times and bad.

It may seem surprising that the extreme range in the British national income was no more than £540 million (1932 subtracted from 1929), but that is, of course, a drop of considerably more than 10 per cent, and it should be remembered that our economy was not in a really flourishing condition in 1929. Furthermore, there was a series of three years of decline, which is always more painful than a sudden deflation followed rapidly by recovery. And by 1934 the average income of 1925-1930 had still not been attained again; which is, indeed, striking evidence of the magnitude of the great depression.

As we should expect, consumption by persons varied less than the net national income: the extreme range here is only £260 million (1932 from 1929). Many must have been trenching into savings during the bad years, while relief was making possible consumption for others who would have been destitute without the intervention of the State. The behaviour of consumption by persons, in comparison with that of net national income, accorded strikingly with the relevant propositions of Keynesian theory.

The two British price indices behaved typically. The immense fall of the wholesale price index reflects depression not only in Great Britain but

¹ From W. Nelson Peach and Walter Krause, *Basic Data of the American Economy* (1948), Tables 37, 73, 74. ² The Economist Intelligence Unit, 1948.

also in foreign countries, some of which were in worse case than ourselves. The much slighter movement of the cost of living index should be related to the figures of consumption by persons.

In the case of the United States we find demand deposits considerably more responsive to depression than those in Great Britain. This was due not to the greater use of the cheque-deposit system in the United States, but to the fact that that economy fell from a higher level to a greater depth than did Great Britain's: the appalling bank failures in America extinguished deposits on a large scale while no such thing occurred here, thanks to the impregnable strength of our great branch banks.

National income figures for the years 1925-8, as also consumer expenditures for these years, are unfortunately unavailable. But there are sufficient figures of national income to show a descent over four successive years from what was undoubtedly a peak in 1929 to just over 45·3 per cent of the record year. No words are necessary to comment upon such a shocking figure.

As in Great Britain, so in the United States, consumer expenditures fell much less than did the national income. But the fall in America was much greater than ours: the expenditure in 1933 was under 58·5 per cent of that in 1929; which figure indicates both the severity of the suffering of the people and also how wealthy they were as a nation before Nemesis overtook them. It was, of course, the deficit spending of the New Deal more than any other force which maintained consumer expenditures compared with the national income.

We may feel some surprise that American wholesale prices did not fall further than the index shows them to have fallen, particularly since less depressed foreign countries exerted little 'pull' upon the extensive and largely self-contained economy of the United States. The chief reason for the moderate size of the fall is to be found in restriction of output, partly brought about by private enterprise either acting in self-defence or bankrupt and not producing, and partly deriving from Government policy.

The smallest movement of all is in the cost of living index, which should occasion no surprise in the light of the few chief considerations enumerated above.

Foreign exchange rates may serve to show the vicissitudes of our times.

Table XV may serve to sum up the history of the foreign exchanges for some important countries since 1913. Of the belligerents of World War I only the United States maintained its currency on the Gold Standard (or gold on the Dollar Standard, according to the point of view) throughout hostilities; besides America only Great Britain of the belligerents shown restored the old parity afterwards. For the United States this was no strain; for us it was. The other three Allies suffered what we have called enormous inflations and all devalued their respective currencies after the war. We need say no more about Germany. The neutrals of World War I all re-established the Gold Standard at their previous parities: although they

were not involved in the fighting, nor in the vast expenditure which that entailed, it would be correct to classify their inflations as having been large.

We have touched upon the British abandonment of the Gold Standard which brought the period of stabilisation after World War I to an end. The three Scandinavian countries followed Britain's lead at once. The United States abandoned the Gold Standard while possessing a vast reserve of gold in the hope of influencing her price-level to rise: in 1933, as our previous figures have indicated, she was in the depth of depression, and was prepared to take any sort of step which seemed however remotely to promise any relief. France, Italy and for some years Belgium, joined by Switzerland and Holland, formed after 1931 what was called the Gold Bloc. The ex-belligerents by reason of their devaluation (by the fact that unlike Great Britain they had not overvalued their currencies at the time of stabilisation), and Switzerland and Holland by reason of their financial strength, were able to maintain their currencies when others could not. The other way of looking at that matter is to say that for reasons of financial orthodoxy (or bigotry) they caused their peoples to suffer some years of depression more acute than necessary. But this hostile view of Gold Bloc policy is not really fair: in particular, France, Italy and Belgium had had 'enormous' inflations and public confidence might have been lost entirely if further devaluation had been put into effect as early as 1931.

The date 1 January 1937 is arbitrary: it is chosen because it falls in the period of the Gold Reserve Standard. The various degrees of depreciation of different currency units, as measured against their gold contents of 1929 and of 1913, retain perhaps a certain historical interest.

Germany, at that time guided by the brilliant and unscrupulous hand of Hjalmar Schacht, was practising an astonishing technique in relation to the foreign exchanges. Two exchange rates are shown, but there were, indeed, half a dozen different sorts of marks, with restrictions on the disposal of all of them except the free marks which in fact foreigners could get hold of only by surrendering amounts in their own sounder currencies. The whole intricate and sordid apparatus was a means of enabling Germany to obtain the raw materials required for rearmament, while she gave to other countries such goods, mostly luxuries, as she could spare.

By 1950 some thirty-nine countries had par values for their currencies. France, Switzerland and Sweden are notable exceptions, as are Germany and Italy for obvious reasons. This is to say that the gold value of the thirty-nine currency units has been fixed: this arrangement has to do with the International Monetary Fund with which it will be more convenient to deal in Chapter XVIII. But if this theoretical stabilisation has taken place, as a system it is only a polite fiction at the moment, as for some years it will certainly continue to be. There are no restrictions regarding dollars nor Swiss francs, for anyone who can get them, but the rest of the foreign exchange market is bound with many bands of restriction.

Regarding the indices of gold value, it will be seen that various currency units have appeared the strongest at different times. In 1929, as shown by

column (6), only the French franc, the lira and the Belgian franc reflected the shrinkage brought by devaluation, though the value given for the mark is subject to correction of course by an extremely wide margin.

By 1937 it was the Dutch guilder, as shown by columns (9) and (10), which had lost least of its gold value; the French, Belgian and Swiss francs came next if comparison is made with 1929, as in column (9), and the American dollar after that; but if the comparison with 1913 is made, as in column (10), the Swiss franc is in the second place behind the guilder, with the dollar third.

The figures of 1948, shown in column (11), present some varied comparisons: with 1937 as criterion, as shown in column (12), we have the Swedish krone first, the Swiss franc second and the dollar a close third, the Dutch guilder having fallen behind. But column (13), using 1929 as basis, gives the Swiss franc first, the Swedish krone second and the dollar third. And column (14), for which 1913 is the base year, leaves that order unchanged.

For the figures of 1950, given in column (15), four comparisons are made. The devaluations of September 1949 are revealed by column (16), in which the dollar and the Swiss franc stand out as the strong currency units. If the comparison is taken further back, before World War II, as in column (17), it is still the dollar and the Swiss franc which remain strong. If we take the comparison back before the great depression, however, as column (18) does, it is the Swiss franc which comes first and the dollar second; a relationship which remains if the comparison is pursued back into the time before World War I, as in column (19).

Too much significance should not be attached to these comparisons. It is sums in dollars which other nations want to earn to-day; though sums in Swiss francs are very acceptable also. Yet, for all its modest showing in the comparisons which reach back to earlier times, the Belgian franc is one of the 'harder' currency units, and amounts in that currency are desired earnestly by other countries. The French franc has not run strongly in the race.

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CHAPTER XIV

THE BANK OF ENGLAND IN THE PAST AND THE PRESENT

The Bank of England in the nineteenth century faced opposition and crises, views on central banking being divergent: the Bullionists and the parliamentary opposition; the Currency School and the Banking School.

WHEN the depreciation of the Bank of England's notes became serious during the Napoleonic Wars, public feeling, vented in Parliament, required an investigation: bullion was being quoted at a premium and sterling had fallen on the foreign exchanges. In 1810 a parliamentary committee, the Bullion Committee, was set up. After taking evidence it reported: that the Bank of England notes had indeed depreciated; that the excessive issue had turned foreign exchanges adverse; that the issue should therefore be restricted to raise its value; that the notes should become convertible again within two years; that it would be a breach of public faith to reduce the bullion content of the guinea so as to conform with the lower value currently attaching to notes.

The Bullion Committee took the view that the pound was equivalent to a piece of gold of specified weight and fineness, and, when its proposals were being debated in Parliament, George Canning, who supported the proposals, poured scorn upon some tentative remarks made by Lord Castlereagh to the effect that the pound sterling was (in modern terms) a unit of account.

The parliamentary opposition to the report was very muddle-headed; nevertheless, resolutions put forward in the tenor of the report were rejected, and resolutions in the opposite sense, some of them patently foolish, were passed. The upshot of the matter was that cash payments were not to be resumed until six months after the end of hostilities.

The wisdom of the Bullionists has been praised widely, and it is true that they displayed a superior understanding of the monetary forces at work; yet it may be doubted whether a deflationary policy, of the intensity to restore the Bank's notes to face value in terms of bullion, would have proved helpful to the efficient conduct of the war.

At the end of the Napoleonic Wars there occurred a spontaneous deflation: prices collapsed of themselves, without any strong restrictive measures on the part of the Bank. We may describe the process as an adverse change in liquidity-preference and a decline in the marginal efficiency of capital. The collapse, which included a fall of gold to the

Mint price, enabled the Bank, and the country bankers too, to resume payment in gold. The people, however, preferred the notes, but, while this unforeseen development was troubling the bankers, there began, with happy irony, an external drain which compelled the Bank again to stop cash payments. This drain of gold resulted partly from the recovery after the slump (a reaction of liquidity-preference), greater in England than elsewhere, and partly from Government borrowing at the Central Bank.

After another committee had studied the matter, the Government began to repay debt on a large scale to the Bank, and this deflationary measure, accompanied by restrictive action on the part of the Bank, enabled cash payments to be resumed in 1821.

It was only after the resumption of convertibility that the opposition became vocal: the depression was undoubtedly severe and bankruptcy and misery prevalent, not in England only but throughout Europe. Distress meetings of farmers and debates of Parliament availed nothing. The Gold Standard was getting set to score another century.

Some relief from depression, however, came swiftly: in 1824 and 1825 there began a speculative boom which very rapidly reached its crisis. In the last months of 1825 prices in general fell, and, in particular, prices of securities collapsed. This rendered unsound the position of bankers who had lent on small margin; for, if the value of collateral accepted were 20 per cent greater than the amount of the loan given on it, and the value of the collateral on the Stock Exchange fell by 30 per cent, 40 per cent or 50 per cent, a banker's own position was undermined.

At first the Bank refused to lend to those in difficulties, and the helpless ruin and misery resulting from that policy were remembered long. When matters reached a desperate condition, the Bank consulted the Government, which declined to help. After that, however, the Bank began to lend freely. This change of policy saved the situation—for the survivors. But the crisis, due to overlending by the Bank and the country bankers, had brought down large numbers of banks and merchants.

In 1833 the Bank's charter was due for renewal, and certain changes were made: in particular, any rate of interest could be charged on three months bills, whereas 5 per cent per annum had been the maximum permitted by the law of usury before that date. The succeeding years were marked by renewed investment on a large scale and of a somewhat speculative nature. In 1836 there were large exportations of gold to the United States and Ireland due to internal events in those countries. In 1837 a panic was averted by courageous lending on the part of the Bank. There was another factor, however, which helped to ease the situation, namely, excessive expansion abroad, which brought gold to England. Deflation came suddenly on the Continent, and the drain of bullion which it occasioned from England was increased by unusually large imports of corn made necessary by crop failure. All this time, the Bank was gaily maintaining a low rate of discount, actually lower than the rate in the money market, whose members therefore brought bills to it for discount

The gold reserve shrank and shrank; finally, when the situation was almost desperate, the help of the Banque de France was secured, and this carried the Bank through the crisis.

The manner in which credit was regulated was clearly unsatisfactory; the proper principles and methods to be employed became the subject of discussion and controversy, which crystallised, within a few years, into two divergent theses. The Currency School, which expressed itself first and was the more influential, maintained that gold was the proper medium of currency; notes there might be, but their volume should vary strictly with the amount of gold possessed by the Bank.

In opposition to this view, the Banking School held that sufficient notes should be available for the needs of business; that over-issue was impossible since notes were only lent and would return to the issuing bank if an excess did manage for a while to get into circulation (the theory of the reflux). In addition, the writers of the Banking School (truly) perceived that unusually large issues were required at certain seasons of the year.

The weakness of the Banking argument lay in the fact that the reflux, when it occurred, might, in fact, be of a large order, arising from great over-issue long undetected, and bring about crisis, panic, and perhaps the suspension of convertibility into gold.

The weakness of the Currency School was the assumption, unconsciously made, that the volume of gold would be adequate for business needs; that is, they did not perceive that a disastrous fall of prices might result from the adoption of their principle.

This disastrous fall of prices did not occur, but this was due to the development of banking, that is, to the growth of deposit money. If they had been correct in supposing that prices were related to the quantity of currency, a mistake which arose from defining money as currency, then disastrous deflation would have resulted from the Bank Act of 1844.

The Bank Charter Act of 1844, establishing the present form of the Bank of England, did not solve the monetary problems; but the Bank improved its methods of control in the subsequent crises.

This Act, enshrining the Currency School theory, split the Bank into two separate departments. The Banking Department was to carry on ordinary banking business. The Issue Department was to be a wholly automatic mechanism: its assets were to consist of £14,000,000 worth of government securities (which did not, indeed, accord with the strictest Currency School doctrine) and of gold in coin¹ or bars; the note-issue constituted its liability. The part of the issue backed by securities became known as the Fiduciary Issue. Except for this, therefore, Bank of England notes became gold certificates.

But there were also the note-issues of the country banks; these were dealt with as follows: their maximum issue was never to exceed the average circulating early in 1844; if a banker failed, his right of note-issue

¹ Some silver coin was permitted, but was never important.

became forfeit, as it did also if amalgamation raised the number of partners to more than six. Thus, there were to be no new country issues and the existing ones were to lapse. The Act permitted the Fiduciary Issue of the Bank to be raised by two-thirds of the amount of a country issue when the latter lapsed. By 1923 when the last country issue had lapsed, the Fiduciary Issue had risen for this reason as we shall see to £19,750,000, an increase of only £5,750,000. Finally, the Act provided for the weekly publication of the Bank Return, a statement like an abridged balance-sheet.

The Act did not work as expected. By 1846 there was a boom of the usual pattern, with crisis hard upon its heels. The Bank, responsible in that its excessively low Bank Rate had permitted an inflationary position to develop, thereupon refused to lend. Finally, the Government was persuaded to promise an Act of Indemnity for the Bank if the fiduciary limit were exceeded. At once the Bank began to discount freely, and the crisis passed without the legal limit being exceeded—a clear indication that deposits at the Bank were the sort of money required.

Another crisis of a severe nature occurred in 1857: again the letter was sent promising an Act of Indemnity, which was actually passed since the limit was exceeded on this occasion. There was one significant difference, however, between this and earlier crises, namely, that the Bank did not try to restrict its lending. It had come to recognise that its unique position required unstinted lending in a crisis; that it must be the lender of last resort.

After the crisis of 1847, the Bank had perceived the necessity of a high Bank Rate in times of emergency; after the crisis of 1857, it saw that a high Bank Rate must be used to prevent emergencies from developing. For, if the schedule of the marginal efficiency of capital is greatly above the schedule of interest rates, inflated profits result, and these threaten general cumulative inflation. The Bank raises Bank Rate at a time when the market is discounting bills with it; since brokers, unable to borrow elsewhere, will make a loss if they have to take bills to it which they have themselves discounted at a lower rate, they raise their own rates accordingly; with a given schedule of liquidity-preference, such an advance in the short-term market attracts funds from elsewhere; that is, holders of longer-term securities sell them and invest on shorter term; but such sales of longer-term assets depress their value, which is the same as increasing the rate of interest on them. Thus, the general advance in interest rates, occasioned by an increase in Bank Rate, reduces prospective profits from an inflationary level.

After another crisis in 1866, the Bank established the working principle that Bank Rate should normally stand above, and not at the same figure as, the market rate for three months bills, a change which strengthened its power of control. Subsequent crises before World War I were well within the capacity of the Bank to surmount. The Bank Rate technique had been perfected as an instrument of control adequate for the relatively placid circumstances of the times. For the urgent moments of stringency, of

which 1890 and 1907 furnished further examples, prompt and plentiful lending by the Bank sufficed. Despite some traditional but transparent disavowals of responsibility, the Bank really recognised its function as the Central Bank controlling credit in Great Britain and, indeed, exercising a policy influential throughout the world.

The Bank of England's weekly return merits examination.

Let us take first a recent return of the Bank of England in order briefly to explain some of the entries before proceeding to a comparison of weekly returns at certain different dates.

TABLE XVI

BANK OF ENGLAND: RETURN FOR WEEK ENDED WEDNESDAY,
30 JUNE 1948

ISSUE DEPARTMENT

	£		£
Notes issued:		Government debt ...	11,015,100
In circulation ...	1,252,217,940	Other Government securities ...	1,288,217,191
In Banking Department ...	48,029,893	Other securities ...	755,111
		Coin (other than gold)	12,598
		Amount of Fiduciary Issue ...	1,300,000,000
		Gold coin and bullion (at 172s. 3d. per oz. fine) ...	247,833
	<u>£1,130,247,833</u>		<u>£1,300,247,833</u>

BANKING DEPARTMENT

	£		£
Capital ...	14,553,000	Government securities	351,699,291
Rest ...	3,610,391	Other securities:	
Public deposits ¹ ...	14,509,505	Discounts and advances:	
Other deposits:		17,785,715	
Bankers	325,414,308	Securities:	
Other accounts:		32,059,648	
92,180,976			49,845,363
	<u>417,595,284</u>	Notes ...	48,029,893
		Coin ...	693,633
	<u>£450,268,180</u>		<u>£450,268,180</u>

Notes, now as formerly, constitute the sole liabilities of the Issue Department: over £1,250 million were in circulation, or over £28 per head for the population of England and Wales, a figure (excluding coin) which seems remarkably high, particularly when we recall that well over a quarter of the population is under fifteen years of age. But we must remember too that considerable quantities of Bank of England notes find their way into

¹ Including Exchequer, savings banks, Commissioners of National Debt and dividend accounts.

Scotland and Northern Ireland,¹ where they are legal tender, and even into the Irish Free State, although these countries all have separate issues; that 'notes in circulation' include those "set aside as cover for the note-issues of banks in Scotland and Northern Ireland to the extent to which those issues exceed limits prescribed by Parliament";² furthermore, that the amounts of English notes held abroad by foreign exchange dealers must amount, in the aggregate, to a large figure; that practically every firm, including retail shopkeepers, has its own stock of till-money or petty cash; and, finally, that the London Clearing Banks alone possess well over £150 millions.

The rest of the notes—on 30 June 1948 some £48 million—forms the note reserve of the other Department of the Bank, such notes being available for all those, including notably the Clearing Banks, who have accounts at the Bank.

The first of the assets of the Issue Department is described as 'Government Debt': this amount was lent by the Bank in its early days to the Government, and has not altered since 1844. These £11 million are included among the assets balancing the Fiduciary Issue, which on our chosen date, 30 June 1948, stood at £1,300 million. The great bulk of these assets, however, are Other Government Securities, that is, borrowing by the Government for which scrip is issued, there being as evidence of the Government Debt only a book entry (and a century of Bank Returns!). Other Securities are first-class commercial bills, but it will be seen that these are of minor importance, as is the entry for coin, which by law may not exceed £5½ million. Gold coin and bullion were then valued, as the return tells us, at 172s. 3d. an ounce fine. The price corresponding with the gold par shown for 1948 in the last chapter was 173s. 8·367d.: the undervaluation by 1s. 5d. an ounce was not a great matter and the amount of gold which the Bank possessed was so minute that this is a point of negligible detail. Such monetary gold as the country does possess is practically all in the hands of the Exchange Equalisation Account, which still exists (as a department of the Treasury as before) but which does not now control the foreign exchange market by its operations as it did in the days of the Gold Reserve Standard.

Now let us turn to the Banking Department. On the liabilities side, there is first an item of some £14½ million of capital which has not altered since before the time of the Bank Charter Act of 1844. The capital now belongs to the State but the amount has not changed. Rest is also a traditional item, which has fluctuated slightly above £3 million for a century, rising as the dividend approaches; it is a reserve of undistributed profits, which have also become a liability of the Bank to the State, of course, since the nationalisation of the Bank.

The return tells us what constitute Public Deposits. Of the Other

¹ The average per head for the whole United Kingdom would be over £25.

² *Committee on Finance and Industry Report* (the Macmillan Committee), Cmd. 3897, 1931, para. 66.

Deposits, the bulk belongs to the London Clearing Banks, which as we have seen rank their Bank of England deposits as 'cash' and use them to settle the daily balances at the clearing. The Other Accounts belong mostly to other members of the Money Market, particularly to its old-established firms.

On none of its deposits does the Bank pay interest.

On the assets side of the Banking Department, we find more Government Securities, like those in the Issue Department. This entry includes Ways and Means Advances from the Bank which passed £500 million during World War II and are shown currently in Government statements of the National Debt: these Advances are borrowings by the Treasury of funds lodged by the Government Departments at the Bank, and also Deficiency Bills, if any, which are borrowings by the Treasury from the Bank for the purpose of paying interest on the National Debt; both of these sorts of borrowing by the Treasury have to be repaid within specified times.

Of the Other Securities, the Discounts and Advances cover assets which come into the possession of the Bank on the initiative of the Money Market (excluding the commercial banks, of course, which do not directly borrow from nor discount at the Bank of England). The item, Securities, consists of investments¹ other than Government obligations which are purchased on the initiative of the Bank. This "psychological method of book-keeping"² is rather helpful as we shall observe in Chapter XVII. When the Bank wants to expand the volume of money, it buys either Government debt, which will rank as Government Securities, or commercial bills which will appear as Securities; in either case Securities result from a positive action by the Bank, whereas Market reactions always affect Discounts and Advances.

The small item, Coin, hardly needs comment: it is a small reserve for the Joint-Stock Banks if they should need it, and so for the country at large.

A comparison of the Bank of England's returns at various dates summarises some important monetary changes.

In Table XVII Bank Returns for six dates spaced over a period exceeding a century are arranged for the sake of comparison in a form differing from that in which they are published. We may consider the whole of the Issue Department first.

Column (1) shows us the growth in amount of the Notes in Circulation; but it will be convenient to defer consideration of this development so as to include it in a brief examination of the increase in the Fiduciary Issue.

We may notice, however, that the Notes in the Banking Department have not increased proportionately; in fact, just after our last date they shrank to under £12 million, another matter on which our examination of the Fiduciary Issue will shed light. One trifling point which we must state for the sake of accuracy is that the Weekly Return before 28 November 1928

¹ They include shares in the Bank for International Settlements. See Chapter XVIII.

² Hartley Withers, *The Meaning of Money* (1932), p. 245.

TABLE XVII
BANK OF ENGLAND WEEKLY RETURN ON SIX SELECTED DATES
ISSUE DEPARTMENT

	LIABILITIES			ASSETS								
	(1) Notes in circulation	(2) Notes in Banking dept.	(3) Total liabilities	(4) Govt. debt	(5) Other Govt. securities	(6) Other securities	(7) Silver coin	(8) Coin other than gold	(9) Fiduciary issue	(10) Gold coin and bullion	(11) Silver bullion	(12) Total assets
7 Sep. 1844 ¹	20,176,270	8,175,025	28,351,295	11,015,100	2,984,900		—	—	14,000,000	12,657,208	1,694,087	28,351,295
15 July 1914 ²	29,315,255	27,592,980	56,908,235	11,015,100	7,434,900		—	—	18,450,000	38,458,235	—	56,908,235
21 Nov. 1928 ³	132,802,375	48,161,710	180,964,085	11,015,100	8,734,900		—	—	19,750,000	161,214,085	—	180,964,085
28 Nov. 1928 ³	367,001,148	52,087,797	419,088,945	11,015,100	233,568,550	10,176,193	5,240,157	—	260,000,000	159,088,945	—	419,088,945
3 Feb. 1937	457,311,181	56,349,479	513,660,660	11,015,100	187,879,503	1,091,347	14,050	—	200,000,000	313,660,660	—	513,660,660
30 June 1948	1,252,217,940	48,029,893	1,300,247,833	11,015,100	1,288,217,191	755,111	—	12,598	1,300,000,000	247,833	—	1,300,247,833

BANKING DEPARTMENT

	LIABILITIES						ASSETS						(14) Proportion per cent	
	(1) (Proprietors') capital	(2) Rest	(3) Public deposits	(4) Other deposits		(6) Seven-day and other bills	(7) Total liabilities	(8) Govt. securities	(9) Other securities		(11) Notes	(12) (Gold and 'silver') Coin		(13) Total assets
				Bankers	Other accounts				Discounts and advances	Securities				
7 Sep. 1844 ¹	14,553,000	3,564,729	3,630,809	8,644,348	1,030,354	31,423,240	14,554,834		7,835,616	8,175,025	857,765	31,423,240	67.9	
15 July 1914 ²	14,553,000	3,431,484	13,318,714	42,485,605	29,010	73,817,813	11,005,126	33,623,288	27,592,980	1,596,419	73,817,813	73,817,813	52.3	
11 Nov. 1928 ³	14,553,000	3,204,147	14,898,189	99,472,105	2,591	132,130,032	48,340,327	34,757,491	48,161,710	870,504	132,130,032	132,130,032	42.9	
28 Nov. 1928 ³	14,553,000	3,254,001	21,452,051	62,379,409	37,185,203	2,649	138,826,313	52,180,327	52,087,797	757,041	138,826,313	138,826,313	43.7	
13 Feb. 1937	14,553,000	3,607,319	12,214,103	96,105,653	38,273,601	—	164,753,676	80,449,242	56,349,479	506,577	164,753,676	164,753,676	38.8	
20 June 1948	14,553,000	3,610,391	14,509,505	325,414,308	92,180,976	—	450,268,180	351,699,291	32,059,648	48,029,893	693,633	450,268,180	11.3	

From A. Andreadès, *History of the Bank of England* (1935), p. 290.

² From Hartley Withers, *Bankers and Credit* (1924), pp. 26–27.

³ From J. L. Laughlin, *Money, Credit and Prices* (1931), vol. II, p. 546.

used to show the Notes in Circulation and the Notes in Banking Department as a combined figure entered against Notes Issued, which was also the total of the liabilities of the Issue Department. Thus the figures for the Notes in Circulation before that date were obtained by subtracting the Notes in Banking Department from the Notes Issued.

Columns (4), (5), (6), and (7) or (8) together make up the Fiduciary Issue. It will be observed that Silver Bullion used not to form a part of this amount: only in 1928 was Silver Coin included; and our recent debasement of the coinage has caused this heading to be altered to Coin Other than Gold. Gold Coin and Bullion has fluctuated widely with the abandonments of the Gold Standard in 1914 and 1931, with the growth in the scale of the Bank's business and with the almost complete transfer to the Treasury of the Bank's gold stock at the beginning of World War II.

Turning to the Banking Department, we may observe that the separation of Other Deposits into Bankers (4) and Other Accounts (5) dates also from the Currency and Bank Notes Act of 1928. Seven-day and Other Bills have long been unimportant: they ceased to be shown as a separate item in 1934. The growth of the Other Deposits, (4) and (5), and of the total liabilities is what we should expect from a growth of economic activity and particularly as a result of the two major increases in the general price-level which have derived from inflationary finance during the two World Wars. On the Assets side, Government Securities have grown at a pace resembling the increase in Bankers' Deposits. But Other Securities have not grown steadily; this has been particularly because the foreign bill of exchange which was relatively such an important short-term security before World War I declined in importance afterwards. We may notice that the 'psychological book-keeping' whereby columns (9) and (10) are shown separately dates also from 1928. Column (12) was called Gold and Silver Coin for the last time in the return of 8 January 1947; after that it became Coin.

We have added a column showing what is called the Proportion. This is column (11) plus column (12) divided by the sum of columns (3), (4), (5) and (6), in other words divided by all the liabilities of the Banking Department to its customers (but not including liabilities to its owners). The Proportion thus indicates the reserves which the Bank holds immediately available to meet withdrawals of currency by its customers. Before World War I the Proportion used normally to exceed 30 per cent and, if it fell below that figure, a decrease in the volume of money by the action of the Bank could be looked for. Since World War I, however, the Proportion has varied widely, has ceased to serve as an indicator of Bank policy for the immediate future, and now has no real significance.

As the significance of the Proportion declined, *The Economist* began the practice between the two World Wars of calculating what was called the Reserve Ratio. This was done by adding the Gold Coin and Bullion of the Issue Department to the Gold and Silver Coin of the Banking Department, and then dividing the sum so obtained by the "total outside liabilities" which included the total notes in circulation, public deposits, bankers'

deposits and other deposits.”¹ Thus the Reserve Ratio represented not so much the position of the Bank in relation to its domestic creditors as the position of Great Britain *vis-à-vis* other countries: it showed, so to speak, how firmly we were on the Gold Standard, with the implication that if we were very strongly situated the Bank might be expected to let the volume of money expand, whereas contraction might be unavoidable if the position became ‘tight.’ For a time the Reserve Ratio was very stable, also fluctuating above 30 per cent. Thus the Ratio for 28 November 1928 works out at 33 per cent. But after the abrogation of the Gold Standard in 1931 the Ratio too began to vary widely. Thus for 3 February 1937 it works out at 52 per cent—apparently. But there was something odd about that period. The Act suspending the Gold Standard in 1931 repealed only the clause requiring the Bank to sell gold at the statutory price; its buying price remained at the statutory figure equivalent to just under 85s. per fine ounce. It does not seem as if this could have been important, for people would hardly have sold gold to the Bank at that price when the market price had risen (to take 3 February 1937 as an example) to 141s. 11d. Nevertheless there was one agent who did sell gold to the Bank, namely the Exchange Equalisation Account, whose loss incurred thereby fell on the Treasury but was a purely fictitious book-keeping loss which the later revaluation of gold holdings turned into a substantial profit. Thus the current value of the gold stock shown at some £313 million was then over £520 million; and the Reserve Ratio on this basis came to 87 per cent, a fat figure. But the Ratio has ceased to have any meaning with the disappearance of the Bank’s gold stock, and *The Economist* has ceased to publish it. None the less, it is not impossible that conditions might change again so that the Bank once more might possess a substantial quantity of gold, the Ratio of which to outside liabilities it would be valuable and indicative to calculate.

When we have observed the considerable number of changes which our comparison of Bank Returns reveals, and whilst we still have to examine the changes in the amount and nature of the Fiduciary Issue, nevertheless we must acknowledge that the Bank Return is remarkable for its unchanging elements. There are not only Government Debt, Capital and Rest which have become fixed points in a swirl of change; but also some of the entries themselves whose wordings have endured for over a century while the amounts have been changing; and there is the constant form of the Return which has continued unchanged although eminent authorities have recommended alterations in the structure of the Bank which would have entailed a new sort of Return.² Yet almost as these words were being written another of the rare changes in the form of the Bank Return took place. In the Return for 4 August 1948 Public Deposits appeared for the first time split into two parts: Public Accounts and H.M. Treasury

¹ The Economist Intelligence Unit, 29 December 1948.

² Especially the Macmillan Committee, see *Committee on Finance and Industry Report*, Cmd. 3897, 1931, paras. 337–40.

Special Account. The former comprises the same accounts as were entered as Public Deposits. H.M. Treasury Special Account covers funds, arising from American gifts of money or goods under the European Recovery Programme, not yet disposed according to agreement between the two countries¹. We may expect this Special Account to disappear again with the end of the Marshall Plan—in 1952?

A very brief comment may be appended on the nationalisation of the Bank of England. Curiously it calls to mind the distinctly conservative precept, 'rule and change nothing.' For the Labour Government exercised the power of their parliamentary majority to nationalise the Bank, as, indeed, they had said that they would do, but the real alteration resulting from that was negligible, despite the fact that some of the new directors have some sort of connection with the Labour Party. The Bank of England as a private joint-stock bank before nationalisation was, in fact, a public servant. Perhaps no one would claim complete wisdom for it in the exercise of its great powers, but of its devotion to its public duty there can be no doubt. What was difficult for the outsider to perceive was the point at which the Bank's discretion ceased and the Government's responsibility for decisions began. Perhaps this vagueness was the reason for the feeling in some Labour circles that the Bank was a capitalist institution paying little regard to the needs of the common man. What should be said of the years of depression, of course, is that the successive Governments rather than the Bank were responsible for the public misfortunes, not because they were careless of human welfare but because they simply did not know what to do.

The Bank's profits, of course, have long been disregarded in relation to policy. Those from the Issue Department went to the State anyhow. There will be no change here. The first report ever issued by the Bank, in 1947, gave little evidence that all its secrets were going to be divulged. The proprietors used to be the legal possessors of the Bank's hidden reserves which may have been large, and now the State has them, but in that respect the owners were like someone who had acquired Trafalgar Square on the understanding that all its normal uses continued: past profits and increments were used for public purposes. Thus it is difficult to perceive any respect in which nationalisation has brought a change of importance. And it would be interesting to know by what logic the Central Bank should be nationalised and the Joint-Stock Banks not. Can the reason be competition?

*The Fiduciary Issue was the essence of the Bank Charter Act of 1844,
but now it no longer provides a criterion.*

The most important provision of the Bank Act of 1844 was that which stipulated the fiduciary limit of £14,000,000, for this enacted the principle that above that figure notes must be backed pound for pound by gold. About a third of the notes were in practice virtually gold certificates, and,

¹ See *The Economist*, 7 August 1948, p. 238.

as well as the gold coin in circulation before 1914, gold could be obtained for any Bank of England notes. Thus there was in Great Britain a twofold limit to the note-issue, the amount of gold held by the Bank and the Fiduciary Issue.

When the old Gold Standard existed, the amount of gold was regulated by the value of sterling on the foreign exchanges: if sterling went too high, past the gold import point, gold came to the Bank, and the amount of notes increased accordingly; if sterling was too low, gold left the country, so contracting the note-issue. The Bank kept control of the situation by Bank Rate changes and by the use of other devices which reflected upon the exchanges. The Fiduciary Issue was usually considered to be rigidly fixed, so that the movements of gold were the only customary agents for altering the volume of notes; whatever else might happen, England had to 'keep in line'; that is, her currency had not to alter in value in relation to others.

A different method of monetary control is the proportional method, which has two forms: the simpler form requires a proportion, usually 30 per cent to 40 per cent, to be kept in gold against the note-issue; the second form, more suitable for advanced countries, requires a similar proportion of gold to be kept against both the notes and the deposits of the Central Bank. This is equivalent to the Reserve Ratio having a minimum legally enforced. The deposits in question belong to the member banks and commonly constitute the bulk of the Central Bank's deposits. The second form is the more sensible one for countries wherein the deposits of the member banks at the central institution act, equally with notes, as the basis of credit. The 30 per cent to 40 per cent reserve is not usually a minimum which must *never* be encroached upon, but a figure which the *average* monthly holding of gold must equal or exceed; that is, if the Central Bank of a country, bound by law to maintain a reserve ratio of 30 per cent, found that, despite its efforts to restrict credit, its reserve stood obstinately at 25 per cent for the first fortnight of a month, it would be compelled to average 35 per cent for the second fortnight, so as to produce the statutory 30 per cent for the whole month.

Sometimes a tax, payable by the Central Bank out of its profits, was imposed upon any excess of note-issue, but this device was never particularly effective, largely because the amount of the tax was never enough to deter such a great financial power as a Central Bank. If a very high tax of this sort were imposed, the Central Bank might be heavily penalised for pursuing a wise and proper policy. In any event what we said of the Bank of England in this respect applies to Central Banks in general: they do not pay regard to their profits in framing policy; therefore a tax is no effective deterrent.

It is argued in support of the proportional system that it makes for great elasticity; if £20 million comes to the Central Bank, the bases of credit can be expanded by about £60 million and the whole credit structure by a considerable multiple of this amount, perhaps by £600 million. This is a

poor argument. Most authorities no longer hold that large changes in the credit structure should result from relatively small gold movements; we have seen that the most important criterion for monetary policy is the volume of employment. In any case, the elasticity has to work both ways: a loss of £20 million of gold would have to cause a very considerable contraction of credit, perhaps even a crisis and a panic; there is certainly no occasion to cause an unpleasant major movement of this sort on account of minor gold shipments; that would be, not the Gold Standard, but gold mania.

The only way of obviating a considerable contraction of credit when gold left a country practising a proportional reserve system would be to keep a large stock of excess reserves; then the statutory 30 per cent to 40 per cent would become an 'inedible iron ration'; it would have to be there; it could not be used; it might just as well not exist—together rather a silly business.

A third method of controlling the note-issue is to fix a maximum figure beyond which issue is illegal. The amount of gold kept is left to the discretion of the Central Bank. Perhaps this is the best method known. It was used in France before World War I, but it was somewhat farcical in operation, because, as soon as the actual circulation approached the maximum figure, the limit used to be raised. Yet this was not entirely farcical: it enabled the Government to review the policy of the Banque de France from time to time, and if the policy of the Banque had been at fault in requiring the limit to be raised, no doubt the Government would have refused the increase, or, at least, threatened a refusal in order to assure future caution on the part of the Banque.

The Macmillan Committee, appointed before the great depression became really intense to study means of bettering the financial apparatus of England, lent its great and varied authority in support of the maximum figure method of limit. England, however, kept the system of the Fiduciary Issue after the abrogation of the Gold Standard in 1931, but allowed inward gold movements to increase the note-issue to an extent consonant with policy. To the extent that Britain had a favourable balance of payments, there was a balance of foreign money left in our hands; that arose, we must remember, in part from inward flights of short-term capital and not only from increases of exports and similar desirable events. The Exchange Equalisation Fund bought these foreign balances to stop the pound going up on the exchanges; but it did not like holding too much foreign money, so it exchanged the unwanted excess for gold. That process was quite easy while France and other countries were on the Gold Bullion Standard, and, after September 1936, it was still done, because the agreement contracted at that time made provision for this operation.

But the British Fund accumulated too much gold in that way, wherefore some was sold to the Bank. At the end of September 1931 the Bank's gold stock was just over £136 million; by December 1936 it had risen to £314 million. This increase was so great, indeed, that the Fiduciary

Issue had to be lowered to offset it. It is worth a little space to set out all the changes in the Fiduciary Issue to see what has happened to this part of our monetary system.

TABLE XVIII
THE FIDUCIARY ISSUE OF THE BANK OF ENGLAND, 1844 TO 1950

	£		£
1844	14,000,000	Aug. 1941	730,000,000
1855	14,475,000	Dec. 1941	780,000,000
1861	14,650,000	Apr. 1942	830,000,000
1866	15,000,000	July 1942	880,000,000
1881	15,750,000	Dec. 1942	950,000,000
1887	16,200,000	Apr. 1943	1,000,000,000
1890	16,450,000	Oct. 1943	1,050,000,000
1894	16,800,000	Dec. 1943	1,100,000,000
1900	17,775,000	Mar. 1944	1,150,000,000
1902	18,175,000	Aug. 1944	1,200,000,000
1903	18,450,000	Dec. 1944	1,250,000,000
1923	19,750,000	May 1945	1,300,000,000
1928	260,000,000	July 1945	1,350,000,000
Aug. 1931	275,000,000	Dec. 1945	1,400,000,000
Apr. 1933	260,000,000	Dec. 1946	1,450,000,000
Dec. 1936	200,000,000	Jan. 1948	1,400,000,000
Nov. 1937	220,000,000	Feb. 1948	1,350,000,000
Jan. 1938	200,000,000	Mar. 1948	1,300,000,000
Dec. 1938	230,000,000	Dec. 1948	1,325,000,000
Jan. 1939	400,000,000	Jan. 1949	1,300,000,000
Mar. 1939	300,000,000	July 1949	1,350,000,000
Sept. 1939	580,000,000	Sept. 1949	1,300,000,000
June 1940	630,000,000	Dec. 1949	1,350,000,000
Apr. 1941	680,000,000	Jan. 1950	1,300,000,000

The increase in the Bank's Fiduciary Issue was a simple and moderate matter before 1928. As we have seen, the Bank of England was allowed under the Act of 1844 to seek permission to increase its Fiduciary Issue by two-thirds of the amounts of issues lapsed. This then is the explanation of all the moderate increases up to 1923; but we should not conclude from the column of figures down to that date that the whole stock of notes in the country was increasing: evidently it decreased by nearly £3 million. We may observe that the growth of the Bank's Fiduciary Issue was a slow

and steady matter; indeed, the extinction of the country issues took very many years longer than was expected at the time of the Bank Charter Act.

During World War I it was the Treasury and not the Bank which provided the £1 and 10s. currency notes. After the resumption of the Gold Standard had been effected in 1925, the Treasury's issue of notes of the two smallest denominations was consolidated with the Bank's issue of notes of £5 and upwards by the Currency and Bank Notes Act of 1928, the Fiduciary Issue being raised accordingly to £260 million, a figure chosen for the reason rather than any other that it gave the Bank what appeared to be a comfortable margin of notes in the Banking Department and a Proportion conforming with pre-war ideas.

While the figure of £260 million was certainly intended to endure, the legislators (or their advisers) were wise enough in the face of manifest disturbing elements of great force to leave a certain limited power of revision with the Treasury. By Treasury minute to the Bank of England the figure could be raised for a period not exceeding six months, and that permission could be renewed for a total period not exceeding two years, subject to the approval of Parliament after the sending of the minute.

The first occasion on which this power was used was during the crisis of the pound in the summer of 1931, when the Fiduciary Issue was raised by the modest margin of £15 million. Owing to the flight of hot money, the Bank had been losing gold at a furious rate; thus the Treasury minute was designed to release some of the gold held as cover for the currency, to make a little of the iron ration edible, since it was impossible quickly enough to contract the volume of currency and release the corresponding gold assets in that way. The use of the Treasury minute at that stage has been blamed, both because it increased apprehension thereby leading to accelerated sales of sterling, which is no doubt true, and because the amount of £15 million was too small to satisfy the panic demand for gold, which is also true. Yet it must be said that even if the raising of the Fiduciary Issue was late in coming, it was at least a gesture in fulfilment of the international commitment implicit in the Gold Standard; moreover, it is doubtful whether the freeing of let us say £100 million of gold, which would have been the bulk of the Bank's stock at that time, would have been enough to stop the rot. Perhaps it is not entirely irrelevant to the future to speculate as to what could have been done. Drastic action might have consisted of three parts: the releasing of £100 million of gold; an immediate devaluation to an exchange rate of \$4 = £1; and as a dramatic deflationary gesture the raising of Bank Rate to 8 per cent. There are strong criticisms to level at both the latter steps. Devaluation would have broken our international faith and rewarded the speculators as much as the abrogation of the Gold Standard did in fact; it would have been the ritual of the gold religion without its ethic. A deflationary gesture of a vivid sort is to be justified with difficulty in a country having two and a half million registered unemployed, and it was politically impossible for a minority Labour Government. Altogether, even with our being wise after the event,

it appears that the cure might well have been worse than the disease; but the disease was a serious and unpleasant one made infectious to other countries by the treatment of letting things take their course.

The first decrease ever recorded in the Fiduciary Issue followed the acquisition in 1933 of some £50 million of gold from the Exchange Equalisation Account which had come into being in the previous year. The choice of the old figure of £260 million contained the suggestion, rather misleading in the event, of a return to normality. But there the figure remained until 16 December 1936, when it was reduced to £200 million. On that date the Account sold to the Bank £65 million of gold: if the Fiduciary Issue had been left at £260 million, the amount of notes in the Banking Department would have risen to approximately £100 million. Such a very large figure might have had an undesirable psychological effect, for it would have suggested that the Bank could perfectly well expand credit swiftly by a large margin. Such a feeling might have stimulated speculation in anticipation of a rise of prices. At that time, deflation was proceeding quite fast enough, and the danger of cumulative inflation was not to be overlooked. The too ardent enthusiasts of recovery were suitably damped down by this reduction of the limit.

The increase of £20 million in November 1937 was said to be a seasonal requirement to meet the abnormal demand for currency over Christmas; and such, indeed, it was, as we can see from the prompt reduction in the following January, and the corresponding increase, this time of £30 million, in December 1938. But January 1939 brought not a seasonal decrease but an increase, and a large one. The £30 million was cancelled, indeed, but at the same time the Fiduciary Issue was raised by £200 million, thus making a net addition of £170 million to bring the Fiduciary Issue to a record figure of £400 million. Why was this done? At that time rearmament was proceeding, slowly it is true, but economic expansion and the fear of war had led to pressure, some of it speculative, against sterling on the exchanges and a consequent loss of gold by the Account. To hold the rates the Account had to have more gold; thus the Bank transferred to it £200 million at 84s. 11½*d.*, which was equivalent to £350 million at the current price.

In March 1939, however, the Fiduciary Issue was reduced again to £300 million. This change followed a minor monetary revolution effected by the Currency and Bank Notes Act of 1939. Until this time the Bank had still been valuing its gold at 84s. 11½*d.* per fine ounce; henceforth it was to give the reserve the current market price of the week. This proved to be 148s. 5*d.* Thus the gold which it held and had shown as £126·4 million was revalued in the Bank Return of 2 March 1939 at just under £221 million; at the same time a small amount of gold, £5½ million, was bought from the Account so that the gold stock now appeared at £226·4 million; the Fiduciary Issue was decreased by the same amount of £100 million so that the liabilities of the Issue Department were unaffected. The Act also provided that any profit from the revaluation of the gold

stock should be handed over by the Bank to the Exchange Equalisation Account and conversely any loss be made good by the Account, thus insulating the note-issue from changes in the monetary temperature of gold. At the same time the Act of 1939 repealed the obligation of the Bank to give notes for gold, which had remained in force, if not always operative, since 1844. Thus the volume of the note-issue was connected with gold in a rather curious fashion. The public could get neither gold for notes from the Bank nor notes for gold. The value of gold could not, but the quantity of gold in the possession of the Bank still could and did, alter the note-issue. But this condition did not go on in practice for long. In September war broke out and the Bank transferred virtually the whole of its gold stock, £263 million valued at 158s. 6d. an ounce on 30 August, to the Exchange Equalisation Account, the Fiduciary Issue being raised by the slightly greater figure of £280 million.

At first war inflation proceeded slowly, an increase of £50 million not being required until June 1940. But then the war effort and the necessary inflation gathered speed. From 1941 till the end of 1945 with almost seasonal regularity the Fiduciary Issue went up three times a year, on all occasions except one by £50 million. In relation to the Fiduciary Issue it was a steady rate of inflation.

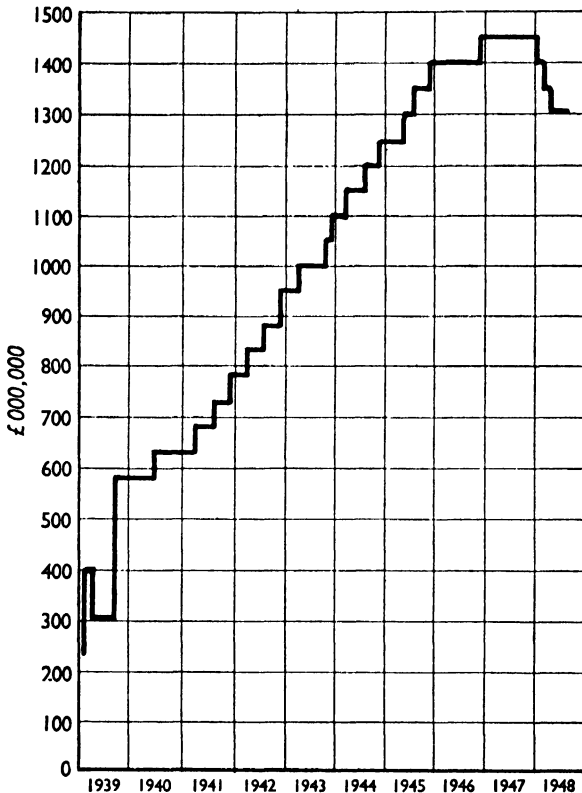
In 1946 inflationary effects were not, indeed, exhausted but they were diminishing. The note reserve in the Banking Department dwindled and with the Christmas bulge of circulation in prospect the Fiduciary Issue was raised once more by £50 million to its peak of £1,450 million. In 1937 a seasonal increase of £20 million had been enough, and in 1938 £30 million, but with the higher scale of incomes and the higher level of prices so the seasonal increase had to be of larger size also.

The fact that Christmas 1947 was passed without an increase of the Fiduciary Issue suggests either disinflation or deflation, which are even more strongly implied by the subsequent and rapid decreases. Yet either conclusion would be wrong. To some extent which cannot be simply stated statistically there seems to have been a turnover from the use of currency to the use of bank deposits, which might be expected anyhow as people settled down in a locality after the war and as others who had not used current accounts before began in view of higher monetary incomes to open these and to 'pay by cheque.' But the increase in current accounts (and *mutatis mutandis* in deposit accounts) due to a reflux of the currency cannot be disentangled with certainty from increases due to other causes, in particular from an increase due to higher loans and overdrafts granted by banks and spent by their customers. What other reason could account in the circumstances of 1948 for the reflux of currency which has made possible three reductions in the Fiduciary Issue? Only an increase in the velocity of circulation of currency, for which there are no statistics, so that we cannot demonstrate the matter. But it seems highly probable that this has also played a part in the lower demand for currency. In 1949 only seasonal changes took place.

Perhaps a simple diagram which looks rather like an irregular flight of steps in silhouette will help to show what the wartime inflation did to the Fiduciary Issue.

ILLUSTRATION II

Bank of England: Fiduciary Issue, 1939-48



So what has happened to the Fiduciary Issue? It used to be a determinant together with the gold stock of the volume of currency. The gold stock, or what remains of it, is still in the hands of the Exchange Equalisation Account and does not count in limiting the note-issue any more. Nor does the Fiduciary Issue. As we have the system at present the Fiduciary Issue conforms to the demand for currency. It is a complete reversal: the tyrant has ended by becoming a puppet. When the circulation approaches the limit, the limit is raised; when the circulation recedes the limit is lowered again. In other words we have abandoned all semblance of controlling demand by means of the currency: the Fiduciary Issue still serves as a speedometer perhaps, but we regulate the pace of the economic machine

by other criteria. We have a limit to the note-issue somewhat like that in the French system before World War I, and in a manner not wholly different from that which the great Macmillan Committee recommended, but—we take no notice of it. Relics of the Bank Charter Act of 1844 remain, of which the separation of the Bank into its two Departments and the form of the Weekly Return are outstanding, but the spirit of the Act has departed. Our currency is part of a pure managed monetary system.

There arises, therefore, the question how our system is managed; but this question we must leave to be answered in Chapter XVII.

Let us be fearless! Will the Fiduciary Issue continue to alter in the future? It is certain to do. But which way? That is more difficult to answer. If gold is used again in Central Bank reserves in general, as it probably will be, then we may expect the Bank of England to have its share. That might enable the Fiduciary Issue to be cut by anything up to half. But it is quite likely that alterations of the Fiduciary Issue may play the part of accommodating the gold stock to the note-issue. Further, unless there is a great increase in the output or a moderate but recurrent increase in the price of gold, or both, then the secular trend of the Fiduciary Issue might well be upwards. That matter is very uncertain, however: it belongs to the middle distant future to start with and there are numerous independent factors which might become causative either on one side or the other. Will the Fiduciary Issue ever be used again as a determinative instrument limiting the note-issue? Never. Will it then disappear altogether? That is equally unlikely. The Fiduciary Issue, whether called by that name or not, will very probably go on, having the nature it has now, into the further future. Is it sound, wise and proper as it is now? Perfectly sound, perfectly wise and perfectly proper.

We have given the Fiduciary Issue some little attention, which would seem quite natural to Dr. Carp who can no longer remember the time when he did not look for the Bank Return week by week in his newspaper. But Prof. Harp has misgivings, enquiring mildly what the precise significance of the matter may be. As Dr. Carp hesitates, the Professor proceeds to enunciate the volumes of employment and of output as the criteria postulated. But Dr. Carp recovers: "Yes, sir, yes, that is so. Of course, we both follow Keynes in our several ways in that. But you see, it may be true that the Fiduciary Issue does not matter very much in itself, but it is connected with the note-issue; and maybe the note-issue is not vital either, but that is a part, and a fairly stable part, of the volume of money; but I know you feel that the volume of money is not what you call determinative either; and no doubt you are right; but the volume of money is related to the totals of income and expenditure. You agree? Yes, and these are causes of just those things which do interest us, the amounts of employment and output. Am I right?"

"I cannot dispute, Doctor, any of the statements which you have made; yet I should have thought that from a methodological standpoint . . ."

"Maybe, my dear sir, maybe. But if we are to understand the economic

mechanism as a whole, then we must understand the working of the parts too. One cog meshes with another, what? All part of the system, you know.”

And perhaps we may leave the last word on this occasion with Dr. Carp.

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CHAPTER XV

A BRIEF DESCRIPTION OF THREE FOREIGN CENTRAL BANKING SYSTEMS

THE Bank of England was set up as a large monopolistic firm to make profits for its proprietors. It grew into our Central Bank because its governors accepted, with some reluctance it is true, the responsibility attaching to monetary power. Only in 1946 after more than 250 years of independence did the Bank become a State institution. Most other Central Banks have been created with the conscious purpose of controlling in some sense the monetary system of a country; the intended scope of their operations, the expected nature of their policy, the extent of their responsibility foreseen—all of these have varied greatly. It is hoped that a short discussion of the Central Banks in France, the United States, and the U.S.S.R. (if Gosbank may be called a Central Bank), with a still briefer glimpse at the monetary systems of which these banks are respectively the pivots, may be of some value in itself and will provide also a scanty minimum of comparative material whereby the Bank of England and to a slight extent our own monetary system may be judged.

The Bank of France resembles the Bank of England in general, but there are important differences.

The Bank of France was set up by Napoleon in 1800, that is, within a few years of the double fiasco of the *assignats* and *mandats*, to provide and to regulate a sound monetary system for the country.

The capital of the Bank was increased gradually until it reached a total of 182,500,000 francs. That was in 1857. The capital then seemed large; to-day it appears minute as certain recent figures will show. The capital was still owned privately up to 1945. It used to be the practice for the two hundred largest shareholders of French nationality to appoint a majority of the members of the General Council (fifteen *régents* and three *censeurs* out of a total of twenty-one) which was responsible for the policy and direction of the Bank. These shareholders known between the two World Wars as 'the two hundred families,' having extensive controlling powers in French industry also, were attacked by political opponents as being a wealthy and irresponsible financial oligarchy; with the result that in 1936 the Bank was 'democratised,' the appointment of a large majority of the members of the General Council passing under the control of the Government, which even before then had appointed the Governor and his two deputies. All the shareholders, the two hundred largest and the rest, were permitted the right to elect only two *régents* out of a total raised to

twenty-six; in which election each shareholder irrespective of his holding had one vote.

In 1945 the same trend was continued to its logical conclusion by the law of 2 December for "the nationalisation of credit." The capital of the Bank passed to the State, the shareholders being compensated, as in the nationalisation of the Bank of England which was to take effect soon afterwards. Thus the Bank of France and the Bank of England have become very similar as to their ownership since the nationalisation of the latter. Again similarly, if the nationalisation of the Bank of England brought about no changes of importance, so equally that of the Bank of France was a formality—though other parts of the law of 2 December 1945 did bring serious modifications in the French monetary and banking system; for among other things the four chief commercial banks of France were nationalised at that time. The Bank of France, again like the Bank of England, has a monopoly of note-issue. But this is much more important in France, for the cheque-deposit system is little developed there compared either with England or with the United States. A recent statement of the Bank of France will make this clear.

TABLE XIX

BANK OF FRANCE: STATEMENT OF 27 MAY 1948 (abbreviated)
000,000 frs.

LIABILITIES			ASSETS		
Bank capital	183		Gold coin and ingots	52,817	
Profits added to capital	303		Gold guarantee	12,408	
		486			65,225
Notes in circulation	768,567		Commercial bills dis-		
Current and deposit accounts	255,512		counted in France	165,265	
Other liabilities	17,561		Commercial bills		
			bought in France	79,846	
					245,111
			Advances to the Government:		
			For occupation		
			costs	426,000	
			Provisional		
			advances to the		
			State	121,800	
			Treasury bills	65,000	
			Advances without		
			interest... ..	50,000	
			Treasury bonds	12,000	
					674,800
			Other assets		56,990
		1,042,126			1,042,126

It will be seen that the note circulation is about three times as large as the total of deposits. If we had looked, however, at the statement of 22 January 1948, the respective figures would have been:

Note circulation: 891,546,000,000 francs;
Total deposits: 83,620,000,000 francs.

On that date, then, the circulation was more than ten times as great. The largest denomination of note in circulation was the 5,000-franc note, and the sum of 5,000-franc notes amounted to about one-third of the whole circulation. Suddenly, the Government, in an effort to catch black marketeers and to get overdue taxes paid, called in all the 5,000-franc notes. (The big devaluation of the franc took place at the same time.) Those who had only small numbers of notes to pay in were reimbursed rapidly; the bigger note-holders were being repaid slowly over the subsequent months, after investigation, different notes being used for the purpose. It was this operation which caused the deposits of the Bank of France to leap up so suddenly and the note circulation as rapidly to decline. The figures of 22 January represent more truly the relative importance of notes and deposits in France.

For this reason, therefore, the Bank of France bulks more largely, as responsible for the note-issue, in the day-to-day transactions of Frenchmen than does the Bank of England in the commercial and personal dealings in England. But there is another important reason why this is so. The Bank of England has nine branches, of importance in the financial mechanism but not directly to the general public. The Bank of France has 660 establishments, 159 being branches proper, 101 being offices, and 399 being auxiliary establishments. With the help of these, the Head Office does a large general banking business with persons and firms. The Bank of France is then a mixed bank, in part Central Bank, in part commercial bank.

Normally, the Bank of France used to keep a large gold reserve. This used commonly to stand at 70 per cent or 80 per cent of its liabilities. But in the present difficult times, even after the many debasements which have been allowed, and after the gold stock has been written up accordingly, it stands at little over 6 per cent.

The cheque-deposit system being but poorly developed, the internal bill of exchange remains an important method of payment and finance in which the Bank of France takes part to an extent by very far exceeding the Bank of England's holding of such paper.

But the really remarkable thing about the Bank of France is its relation with the State. When the British Government is in straits for money it sells more Treasury Bills, which is borrowing on short term from the Money Market; or it makes special arrangements with the large Clearing Banks; or it calls upon the public to subscribe to longer-dated issues; or some combination of these. But it does not borrow large sums from the Bank of England. And for the rest, the British Government balances its budget when that is possible and necessary, and the public grumbles but pays the taxes somehow all the same. The French Government borrows on long and short term also, but when it is necessary to balance the budget it does not always seem possible to do this. After this war, as after World War I, there has been a chronic budget deficit, a recurrent crisis and perpetual shortage of funds. And ever and anon the Government is driven

to borrow from the Bank of France, which is, of course, pure inflation, involving an ever-growing volume of currency. It is this which accounts for the enormous figure of Advances to the Government.

We should notice, however, that the increase in the Fiduciary Issue in Great Britain, which we considered in the last chapter, is of the same nature: that too is Government borrowing at the Central Bank. Yet if past exchange rates are considered, and not the rate of 864 francs = £1,¹ it is the French borrowing which has been by far the greater and the more inflationary in its effect. For the Government to borrow from the people is broadly speaking to take spendable income out of their hands; and to spend that money is to give it back to income again usually with a considerable lag of time on the average. To borrow from the Central Bank is to take nothing from income; and to spend that money is to make a net addition to income.

The Bank of France is thus the Government's bank in a sense rather different from the one in which we say that the Bank of England is our Government's bank.

The Bank of France is also the banker's bank; and as well it exercises a policy controlling the monetary system—when the French Government's financial circumstances leave it free to do so.

As well as devaluating the franc by 44·444 per cent at the end of January 1948, the French Government permitted a free market in American dollars, in Portuguese escudos and in gold. In this free market it appears that the commercial banks have been dealing on behalf of the French Exchange Equalisation Fund, which was operated, like the British one, by the Central Bank. Whereas the British Fund is not now operating, it seems, therefore, that the French have some thought of using the technique developed in the days of the Gold Reserve Standard. But it is too early yet to judge how far this matter will go.²

Like the Bank of England, the Bank of France does not give interest on deposits.

The Federal Reserve System of the United States having a complicated and regional organisation appears very different from the Bank of England; but the differences are in some cases more apparent than real.

At the end of the eighteenth century and in the early part of the nineteenth century, there were in succession two Central Banks in America, the (First) and (Second) Banks of the United States. But these were liquidated respectively in 1811 and 1836 because of hostility towards them on the part of President Jefferson and President Jackson. Dispassionate judgment may allow that each of these Central Banks was a commendable

¹ This was the rate at the time of the Bank of France statement given in Table XIX. The franc was devalued further to 1,061 = £1 on 16 October 1948, and to 1,096 = £1 on 27 April 1949. After the British devaluation of September 1949, the rate became 980 frs. = £1. ² The operations were continued in subsequent months.

and necessary institution; and that, whilst the whole matter was in neither case simple, the political animosity which each excited was ill-founded.

As a result of these political errors, the United States was without a Central Bank until 1914. It is difficult to say to what extent the weakness of the American banking system in the past was due to the absence or late arrival of the Central Bank, to the system of unit banking as opposed to the branch banking system found in other countries or to merely human over-optimism arising from the magnificent economic opportunities which America offered. Probably all three reasons contributed to the recurrent spasms of commercial bank failures which lasted until 1933, although by that date there had been, in some cases for a century, many and important commercial banks of unshakeable strength most prudently conducted. We may believe that there would have been more of these if there had long existed a Central Bank.

In 1913 the Federal Reserve Act divided the United States into twelve parts, whose limits do not always follow State boundaries: in each of these districts a Federal Reserve Bank was set up. The cities where the twelve Banks and their branches are situated are as follows:

Boston, Massachusetts	District Number 1.
New York, New York	District Number 2.
Branch: Buffalo, New York.	
Philadelphia, Pennsylvania	District Number 3.
Cleveland, Ohio	District Number 4.
Branches: Cincinnati, Ohio;	
Pittsburgh, Pennsylvania.	
Richmond, Virginia	District Number 5.
Branches: Baltimore, Maryland;	
Charlotte, North Carolina.	
Atlanta, Georgia	District Number 6.
Branches: Birmingham, Alabama;	
Jacksonville, Florida;	
Nashville, Tennessee;	
New Orleans, Louisiana.	
Chicago, Illinois	District Number 7.
Branch: Detroit, Michigan.	
St. Louis, Missouri	District Number 8.
Branches: Little Rock, Arkansas;	
Louisville, Kentucky;	
Memphis, Tennessee.	
Minneapolis, Minnesota	District Number 9.
Branch: Helena, Montana.	

Kansas City, Kansas District Number 10.
Branches: Denver, Colorado;
Oklahoma City, Oklahoma;
Omaha, Nebraska.

Dallas, Texas District Number 11.
Branches: El Paso, Texas;
Houston, Texas;
San Antonio, Texas.

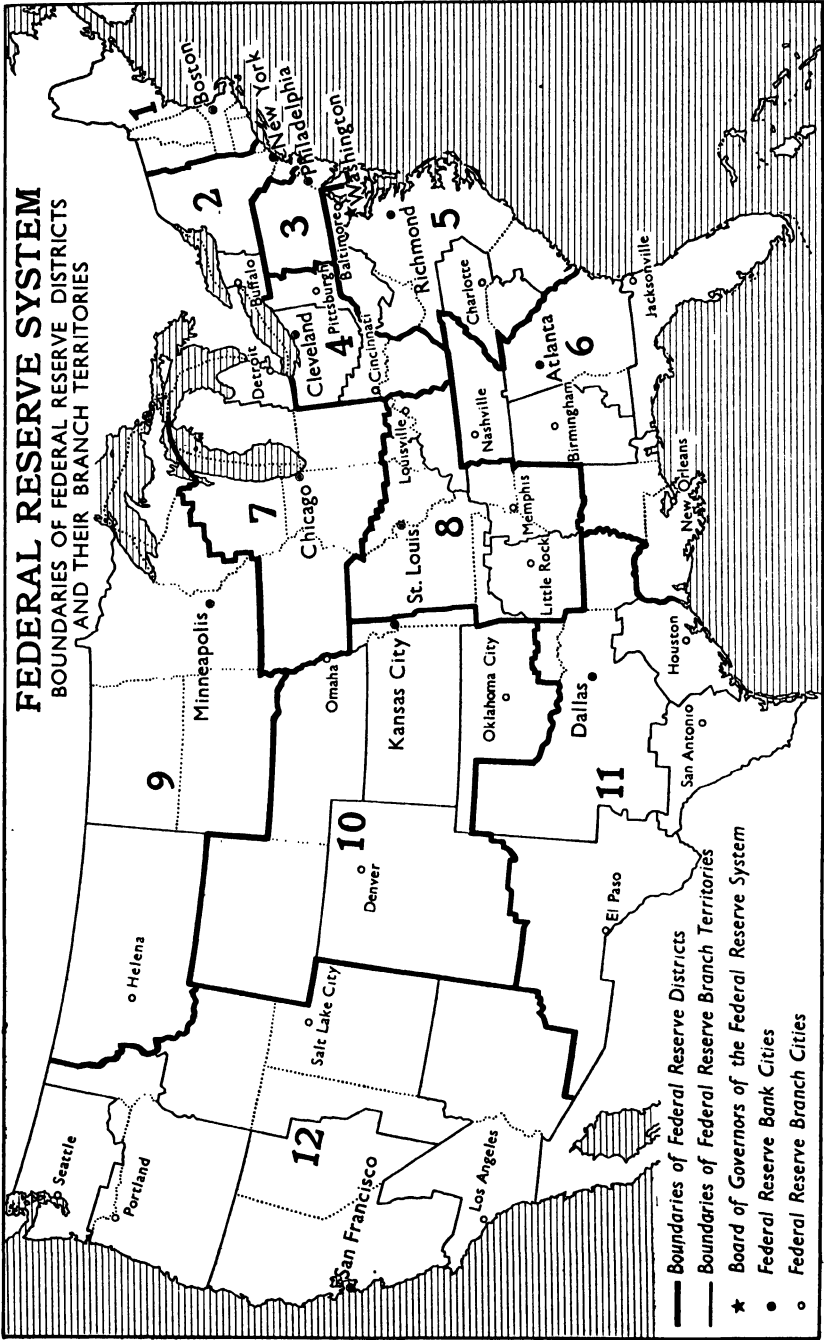
San Francisco, California District Number 12.
Branches: Los Angeles, California;
Portland, Oregon;
Salt Lake City, Utah;
Seattle, Washington.

The map on page 235 illustrates the division. The numbers do not indicate precedence: they are merely numbers, which it is convenient to use, running from north to south and east to west.

Twelve banks were set up as a compromise between the views of those who thought that there should be one Central Bank and the opposing views of those who considered that each of the forty-eight states should be entitled to one of its own. They were intended to be twelve autonomous Central Banks. But there was also constituted in the Act of 1913 the Federal Reserve Board, located in Washington, D.C., and although there was a period in the 'twenties when controlling power seemed to be passing to the Federal Reserve Bank of New York, the development of events and ideas and the trend of legislation have placed ever greater power in the hands of the Board; so that it would not be far wrong to say that the Board is the Central Bank (without any ordinary central banking premises) and the Federal Reserve Banks are its branches. But it is true, at least for such purposes as open market operations and foreign exchange dealing, that the Federal Reserve Bank of New York is *primus inter pares*: in these respects it carries out the Board's policy for the whole system. And we may observe that it is still possible for the President of the Federal Reserve Bank of New York on major matters of policy publicly to express opinions contrary to those of the Board—and to remain President.

But let us first consider briefly the twelve Federal Reserve Banks as a whole. Their capital was subscribed compulsorily by the Member Banks, a method of collecting capital for a central banking system which had not been used before. Each Bank has nine directors who are divided into three groups of three, known as Class A, Class B and Class C. The three of Class A may be bankers; but those of Class B must be persons taking an active part in agriculture, industry or commerce in the Federal Reserve District for which they are chosen. These six directors are chosen by the Member Banks who are divided for this purpose into three groups, large banks, medium, and small banks. The directors serve for three years. Thus in one year the large Member Banks will appoint their A director

ILLUSTRATION III: FEDERAL RESERVE DISTRICTS MAP



and their B director; the next year it will be the turn of the medium-sized Member Banks to do the same; in the third year one director of Class A and one of Class B will be selected by the small Member Banks; and in the fourth year it will be the turn of the large Member Banks again. An Englishman might feel that the large Member Banks are better fitted than others to make such appointments; but it must be remembered that there is in the United States a deep-seated distrust, perhaps not entirely without past reason for existence, of the men in control of large-scale enterprise. In fact, not a great deal of interest is taken in the selection of A and B directors.

But C directors are different: these are appointed by the Board, now properly designated the Board of Governors of the Federal Reserve System, a change of title dating from the Banking Act of 1935 and recognising the enhanced powers of the Board. During their three years of office Class C directors may have no personal relationship with any commercial bank. From each of the twelve groups of C directors the Board of Governors designates the Chairman of each Federal Reserve Bank, who must be a man of wide banking experience, and also the Vice-Chairman.

The chief executive officers of each Federal Reserve Bank are its President and one or more Vice-Presidents. These men are appointed for five years by the respective directors of each Bank, but the consent of the Board of Governors of the Federal Reserve System must be obtained for the appointment of the President and the First Vice-President of each Bank.

Finally, the Board of Governors itself numbers seven members, who are appointed for fourteen years by the President of the United States with the advice and consent of the Senate. Governors who have served for fourteen years are not eligible for re-election.¹ Of the seven Governors, one is appointed Chairman and one Vice-Chairman by the President for four years with the possibility of reappointment within the span of the fourteen-year office. With the exception of Mr. Marriner S. Eccles, recently Chairman and now Vice-Chairman, and possibly Mr. Thomas B. McCabe the present Chairman, the Governors are known outside the United States to a surprisingly small extent considering the momentous powers which they wield.²

There are two other bodies in the somewhat complicated hierarchy of the Federal Reserve System which we must mention.

Open market sales or purchases of Government securities by the twelve Federal Reserve Banks being a most important operation in the control of the volume of credit in the United States, there exists the Federal Open Market Committee which directs policy in this respect. On this Committee there sit the seven Governors of the Federal Reserve System and five representatives of the Federal Reserve Banks. The latter are at the moment the Presidents respectively of the Federal Reserve Banks of

¹ The appointments made as of 1 February 1936 in conformity with the Banking Act of 1935 were for staggered terms of office; one Governor for two years, one for four, one for six, etc., so that one has been retiring every two years.

² The names of the Governors and also of all the other leading men in the Federal Reserve System are given currently at the end of each *Federal Reserve Bulletin*.

New York, Philadelphia, Chicago, Kansas City and Dallas. It will be seen that the Board of Governors, if at one among themselves, hold a majority on the Open Market Committee.

There is also the Federal Advisory Council, consisting of one distinguished representative from each Federal Reserve District; it is the duty of the Council to advise the Board of Governors. Although it is understood that the views of the Council are seriously considered, this body possesses no powers of compulsion.

In dealing with the administration of the Federal Reserve System, perhaps we have said enough already to show that the greater part of the power within it belongs to the Board of Governors. Thus in this respect the American Central Bank is more like the Bank of England than the regional organisation would suggest.

Hitherto we have been using the expression, Federal Reserve System, in the narrower sense to refer to the central banking institutions set up by legislation. The same phrase is used in a wider and looser sense to include, besides these, the Member Banks and sometimes even the whole of the commercial banks of the country. For not all commercial banks in the United States are Members. When the Federal Reserve Act was passed in 1913, the banks in the country fell into two chief classes, National Banks having charters granted by the Federal Government through the Comptroller of the Currency, and State Banks whose charters come from the forty-eight states under their own legal provisions. The Federal Reserve Act required all National Banks to become Member Banks and permitted any others to do so. On 26 May 1948 there were 6,931 Member Banks having total deposits of \$116,000,000,000 and 7,263 Non-Member Banks with total deposits of \$20,800,000,000; thus it will be seen that although the Member Banks number less than half of all the commercial banks, they have none the less nearly five-sixths of all deposits. The recent tendency has been a slow growth in the number of Member Banks and a slow fall in the number of Non-Member Banks.

On becoming a Member, a bank is required to subscribe to the capital of its Federal Reserve Bank an amount equal to 6 per cent of its own capital and reserves, one half of this amount being paid in; the other half can legally be called, but in fact never will be. Again, if a Member Bank increases its capital or reserves a new subscription of 3 per cent must be paid in to the capital of the appropriate Federal Reserve Bank. Conversely if a Member Bank ceases membership or reduces its capital or reserves, a repayment is made to it. Thus the capital of the Federal Reserve Banks is not fixed, although it is somewhat steady, in amount. Total capital paid into the Federal Reserve Banks amounted on 26 May 1948 to \$198,000,000 and total reserves to \$475,000,000; of the individual Federal Reserve Banks, New York being by far the largest with \$69,000,000 of capital and \$145,000,000 of reserves; with Chicago second, Cleveland third and San Francisco fourth; and Minneapolis last with \$4,000,000 of capital and \$12,000,000 of reserves.

The Member Banks receive a 6 per cent cumulative dividend on their holdings of the paid-in capital stock of the Federal Reserve Banks; but as stockholders they have practically no voice in the management of the Reserve Banks.

The clearing of cheques in a country of the size of the United States is an important and difficult process. At the end of May 1948 for over twelve thousand banks remission at par was in operation through the Federal Reserve institutions. This number included all Member Banks and some five thousand Non-Member Banks. In the case of only some two thousand Non-Member Banks were special collection charges required. Where transfer by cheque or other instrument crosses the boundaries of Federal Reserve Districts, adjustment is made between the Federal Reserve Banks concerned by the use of a special fund maintained in Washington; this is called the Inter-district Settlement Fund. The transfer of credit anywhere in the United States can be effected almost instantaneously if necessary through the Federal Reserve Banks.

The Federal Reserve Banks fix their own rates of discount or rediscount but the Board of Governors has the power to review and to determine these rates. Thus again the difference from British practice is in reality slight.

As well as the amount of currency which they keep at their own discretion, Member Banks are required to keep reserves of a different sort against their deposits. These reserves take the form of deposits of the Members at the Federal Reserve Banks. The sizes of the reserves which are arranged as ratios are subject to a certain amount of variation. For this purpose Member Banks are divided into three categories, which together with their reserve ratios are as follows:

	Against demand deposits. Per cent	Against time deposits. Per cent
Central Reserve City Banks	13 to 30	3 to 7½
Reserve City Banks	10 to 24	3 to 7½
Country Banks	7 to 18	3 to 7½

Central Reserve Cities are New York and Chicago; Reserve Cities, including all the principal cities of the United States, number about sixty. Banks located elsewhere count as Country Banks.

At the beginning of September 1949 the operating ratios were:¹

	Against demand deposits. Per cent	Against time deposits. Per cent
Central Reserve City Banks	22	5
Reserve City Banks	18	5
Country Banks	12	5

¹ These ratios were still in force in March 1950. Later information can be found in *The Federal Reserve Bulletin*.

The operating reserve ratios are determined by the Board of Governors of the Federal Reserve System. Until August 1948 the limits to which required reserve ratios could be raised were lower, the ranges being:

	Demand deposits. Per cent	Time deposits. Per cent
Central Reserve City Banks	13 to 26	3 to 6
Reserve City Banks	10 to 20	3 to 6
Country Banks	7 to 14	3 to 6

During the spring and summer of 1948 fears of further inflation had been entertained, and at length Congress raised the demand deposit limits each by four percentage points, and the time deposit limit uniformly by one and a half points. The following month the Board of Governors made use of its expanded powers to raise the current required ratios above the old limits to the figures quoted. Since then they have been lowered again. It will be observed that there remains a lot of scope for restriction of credit by reserve ratio changes. We may notice that from late in 1942 to early in 1948 the ratio for Central Reserve City Banks stood at the same figure as that for Reserve City Banks, namely 20 per cent, in compliance with the idea that it was unfair to discriminate against banks in New York and Chicago by requiring of them a higher ratio. After that, however, the need for credit control became so urgent, and the use of other methods so difficult, not to say dangerous, that this idea of fairness had to be disregarded. The Board of Governors had frequently expressed the view in 1948 and before that the upper limits of the reserve ratios should be raised; the increase in the ratios of Central Reserve City Banks should be understood in this context. It remains to be seen whether identical rates for Central Reserve City Banks and Reserve City Banks will be restored now that the limits lying within the discretion of the Board of Governors have been raised.

How then do these ratios affect the volume of credit? Member Banks aim to keep not the prescribed minima of reserves at their Federal Reserve Banks, but these reserves and considerable margins in addition, the margins being known as excess reserves. Member Banks having excess reserves enjoy a feeling of latitude and freedom to grant to their customers such additional applications for loans as meet with their approval. The force then of raising reserve ratios is not to bring about the immediate creation of greater reserves but to diminish these excess reserves on which rests the power of Member Banks to lend; conversely a lowering of ratios increases excess reserves and the power to lend.¹

But Member Banks may borrow from the Federal Reserve Banks. Indeed, they can make a profit by doing so. For example, Member Banks can take the promissory notes which they have discounted for their

¹ Of Member Bank reserve balances totalling \$19,884 million on 29 September 1948, \$940 million were excess reserves.

customers and rediscount them at a lower rate at their Federal Reserve Bank. Why then do they not borrow in this and similar ways up to the limit all the time? Why, in particular, do they not offset in this manner a raising of reserve ratios? This matter has not been very clearly understood in Great Britain in the past. As the Bank of England publishes Bank Rate week by week, so the Federal Reserve Banks publish a schedule of interest and discount rates applying to various sorts of 'paper' eligible for securing loans or advances from themselves to their Member Banks. But whereas the Bank of England will accept without question any eligible paper which the Money Market takes to it and give loans at Bank Rate on such assets, there is no obligation upon the Federal Reserve Banks to act in this way. The relation between the Member Banks and the Federal Reserve Banks is that of customer and banker. A Member Bank may apply for credit, but for a variety of reasons its Federal Reserve Bank may refuse; or it may comply but 'attach strings' to its consent, particularly regarding the repayment by the Member Bank of sums borrowed and regarding the contraction of the volume of credit given by the Member Bank to its customers. Naturally, a Federal Reserve Bank would not like to disappoint a Member Bank, and normally does not do so. But it is one thing for firms in the Money Market to get loans from the Central Bank according to a custom so old and so honoured in the observance as to be considered their right, as in England; it is quite another thing for Member Banks to be able to obtain loans at the discretion of the Central Bank as in the United States. That is why Member Banks are not normally indebted in any large degree to their Federal Reserve Banks, and why the Central Bank's lending rates are below market rates in the United States, whereas Bank Rate stands above market rates in Great Britain.

It remains to touch upon four other matters in the United States of which the first is the currency. This is surprisingly complicated. It must suffice for our purposes to observe the major points. All the monetary gold belongs to the Treasury, into whose possession it has come and still comes through the Federal Reserve Banks, which receive gold certificates in exchange. But they alone hold these gold certificates which, like the gold itself, do not circulate. The chief notes in circulation are of two sorts, Federal Reserve Notes issued by the Federal Reserve Banks, and silver certificates issued by the Treasury against 100 per cent of silver bullion or 'standard' silver dollars. As well as subsidiary silver coins (which may be taken to include 'standard' silver dollars which are not full-bodied) and minor token coin, there are still outstanding various smaller amounts of five other sorts of notes; but these we will firmly neglect.

It is convenient at this point to return to the question of the reserves of the Federal Reserve Banks themselves. They are required to keep 25 per cent in gold certificates at the Treasury against the sum of their Federal Reserve Notes outstanding and their deposits. Throughout 1948 and for some time before the proportion of gold certificates which they did have was almost exactly 50 per cent. There is thus nothing in the

United States corresponding with our Fiduciary Issue. The American system of currency limitation is a proportional one, having of gold certificates (and thus, at one remove, of gold) the largest 'inedible iron ration' and the largest 'edible iron ration,' both, in the history of the world.

Thus summarising broadly this part of the system of monetary control we may say that on the monetary gold stock depends the volume of gold certificates;¹ the amount of gold certificates may act as the limit to the amount of Federal Reserve Notes² and Federal Reserve Bank deposits; Federal Reserve Bank deposits can be manipulated to raise or lower the lending power of the Member Banks. With the Member Banks, Non-Member Banks must keep approximately in step in their lending policies, else they will find themselves losing their disposable resources. An increased demand by the public for currency will trench into the excess reserves of the Member Banks and thus, again, limit their power to lend.

Next we must notice briefly one point in the relationship existing between the Federal Reserve System and the Government, or, what is not indeed, quite the same thing between the Board of Governors and the Treasury. The Treasury is vitally concerned that low interest rates shall continue: the Federal interest-bearing debt has advanced from \$40,000 million in 1939 to \$250,000 million at the end of June 1948, and interest charges from \$1,000 million to \$5,000 million approximately. The Board of Governors is concerned to hold in check an inflationary situation: one of the normal ways of doing that is, of course, to put up interest rates and to make these effective by open market sales of Government securities. Yet it is not only delicacy of feeling for the problems of the Treasury which inhibits the Board from such a course of action; if interest rates were advanced, this would reflect rather seriously on the value of the assets of all commercial banks; even the Federal Reserve Banks would be affected, though not seriously. The commercial banks are holding, out of total loans and investments of \$114,000 million, some \$66,000 million of Government securities of which only some \$7,000 million are repayable within a year. U.S. Government bonds were floated at or near 2½ per cent and stand on the Stock Exchange at approximately par. Thus, supposing the Board of Governors pushed up interest rates vigorously all round so that long-term rates approximately doubled, the market value of Government bonds (not the short-dated securities) would fall to somewhere in the region of 50 per cent, and ruin and bankruptcy would stare the commercial banks in the face. Indeed, not only the commercial banks: insurance companies, mutual saving banks and other corporations would be seriously affected, to state the matter mildly; and individuals would see a large part of the current value of their capital securities melt away. Now evidently the Federal Reserve System does not exist in order to bring about a condi-

¹ The Treasury however may in certain circumstances 'sterilise' gold; that is, omit to issue gold certificates against it. At the end of May 1948, \$1,067 million of gold was so sterilised compared with a total of \$22,081 million of gold certificates issued.

² At the end of May 1948 Federal Reserve Notes outstanding amounted to \$24,447, million; silver certificates to only \$2,259 million.

tion of this sort, and there is no need nor fear that it will happen; no such disaster will occur. But the result of the great holdings of Government securities by the banks is that the Board of Governors simply cannot use the interest rate plus open market sales method to control credit conditions. Hence the buoyant post-war inflation in the United States; hence also the demand by the Board for greater powers over Member Bank reserve ratios.

Indeed, so far from the Open Market Committee ordering sales of Government securities by the Federal Reserve Banks, these, broadly speaking, have bought the amount of Government securities which the commercial banks have sold since the end of World War II; and it is not unlikely that this process will continue until a better balance is reached among the assets of commercial banks.

In 1933 as part of the New Deal legislation there was set up the Federal Deposit Insurance Corporation, a Government institution, whose capital was partly subscribed by the Federal Reserve Banks.¹ The purpose of the F.D.I.C. is to insure the deposits in banks up to the amount of \$5,000 per depositor. It also exercises supervision over banks insured. At the end of 1947 there were nearly 13,400 insured commercial banks against 783 non-insured. All Member Banks are so insured, and, as the figures show, so also are most of the Non-Members. Since 1933 bank suspensions have been negligible. But it may be remarked that the resources of the F.D.I.C. would not now nor in the near future be adequate nor anything like it to deal with the bank failures which would result from a doubling of the long-term rate of interest. Perhaps it is as well since we have recurred to this hypothesis to say again that no such doubling of the rate will occur nor any crop of bank failures take place as the result of suddenly stiffening interest rates.

As a summary of the complex Federal Reserve System, in the wider sense of the expression, perhaps the diagram on page 243 will be of use.

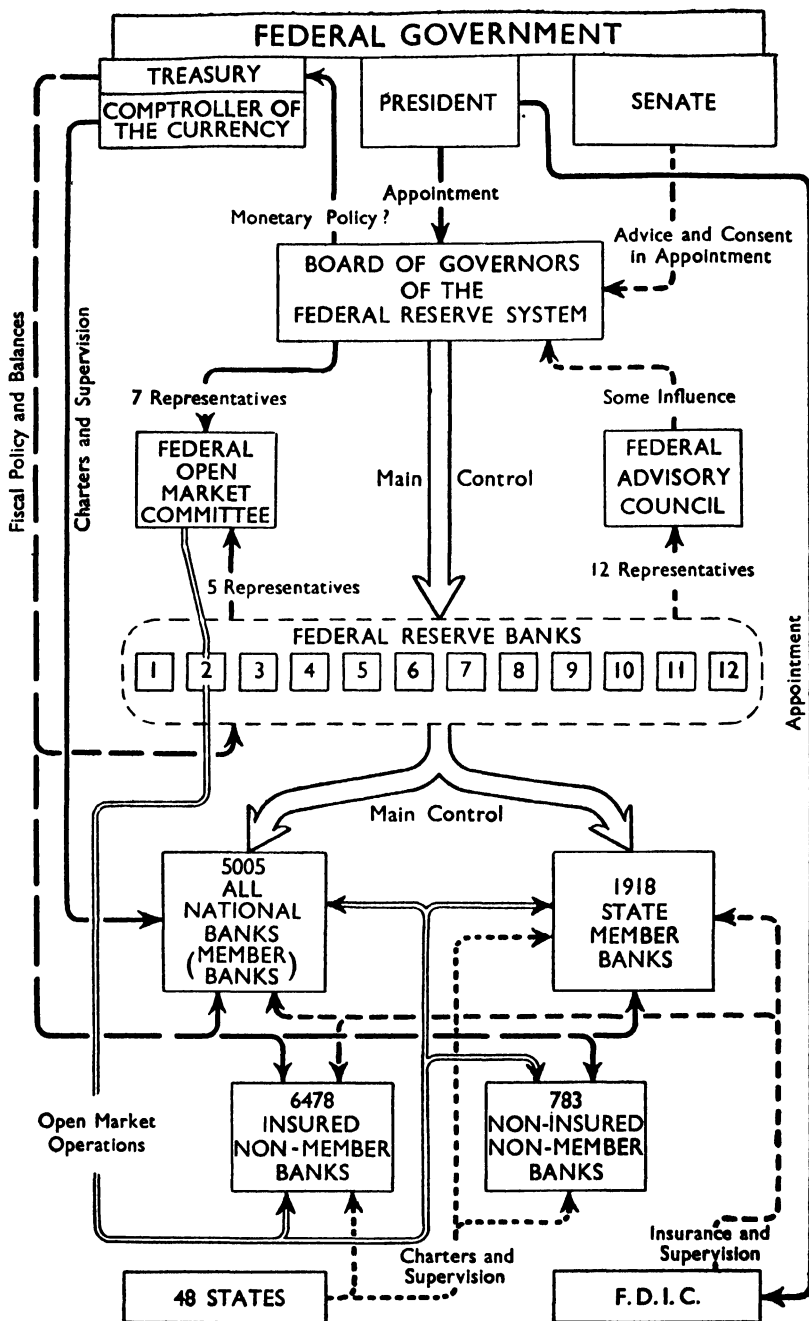
Gosbank in the U.S.S.R. has certain central banking functions but it is not principally a Central Bank.

We have mentioned the U.S.S.R. once or twice in previous chapters, but only for the purpose of making clear that it was excluded from our main considerations. Without entering too far into the complexities and problems of a planned economy, it may be useful, however, briefly to indicate the part played in Russia by the large organisation known as Gosbank, or the State Bank.² There was a State Bank in Imperial times, approximately resembling Central Banks in other countries; but there has been no proper continuity of existence, and certainly not of function, between this earlier institution and the present one. Gosbank, owing its present form to legislation of 1930-32, is a vast system of accountancy rather than a bank of any sort which we understand; but it has certain commercial banking features of a special kind, and some quite ordinary central banking responsibilities.

¹ F.D.I.C. repaid its capital in 1948.

² Gosudarstvenny Bank.

ILLUSTRATION IV: MONETARY CONTROL IN THE UNITED STATES



One quite simple idea about an almost wholly planned socialist economy may prove useful to an understanding of the part played by money in general and Gosbank in particular in the Soviet system. Total output consists, of course, in the U.S.S.R. as elsewhere, of consumption goods and productive capital goods. Now where wages, all other prices, profits and the volume of real investment are all (*inter alia*) controlled by the State, the Government will have a choice of methods in organising its affairs: either it can make the total of personal incomes in the year equal to the value of available consumption goods, or it can make the total of personal incomes equal to the value of output. In the former case it will not need a system of taxation at all: productive capital goods produced will be the property of the State, and by this method it will obtain these, so to speak, for nothing: it received the whole of output; pays out the value of consumption goods, and it has the productive capital goods left on its hands to dispose of according to plan. That would be one way.

But if personal incomes per year are made equal to the value of output, then there must be a system of taxation. For only the consumption goods are intended for purchase by the people, yet the people have purchasing power enough to buy the productive capital goods as well. Thus there must be a method of recapturing from the public this excess of purchasing power; and that method is, of course, taxation.

Simplifying somewhat drastically we may say that it is the latter method which is used by the Soviet Government.

The Government decides in the Five Year Plans, and their subdivisions per year, per quarter and per month what, when, where and how production shall take place. The movement of money follows from the planned decisions. And the movement of money passes through three different sorts of banks, Gosbank, and some three thousand branches belonging to it, four different investment banks and their branches, and the savings bank and its branches. Like every other enterprise giving employment in the U.S.S.R. all of these are, of course, Government enterprises.

Gosbank has as customers some three million Government-owned enterprises, for each of which it keeps two accounts. The public does not bank with Gosbank, but receives income in currency, most of which it either spends or hoards; but the people may place savings in the savings banks where transfer facilities exist.

We may appreciate most readily how the system works perhaps by considering a new Government enterprise coming into existence according to plan. It will receive from the appropriate investment bank¹ a permanent capital donation, which it will never have to repay and on which no interest is charged. Provision for this will be made in the budget of some government; if it is an important enterprise, broadly speaking, in the budget of the Central Government. That money will come from sums deriving from

¹ Selkhozbank for agricultural investment; Torgbank for trade and co-operatives; Tsekombank for housing, communal and cultural purposes; or Prombank, the most important, for industry in general including transport.

taxation (or other sources) which stand to the credit of the government at Gosbank, and are made available by being paid by Gosbank to the appropriate one of the four investment banks. As well the new enterprise will receive its working capital or 'clearing' account (one of the two mentioned above) at Gosbank; this again will be a gift requiring neither interest nor repayment. And so we may imagine the new enterprise to get under way. After its initial installation has been made and paid for by transfer from its investment bank, it hires workers, paying them with currency drawn on its clearing account at Gosbank; and it buys raw materials, etc., paying for these by transfer or currency debited to the same clearing account. It must, as all Soviet enterprises must, pay for goods delivered on receipt: no credit may be given to it by other Government enterprises. Then it receives payment for its products by Gosbank crediting its clearing account.

But one day, we will suppose, this new enterprise finds that it wants to make payments which it has not funds to meet. This is where the second account at Gosbank comes in. It must then apply to Gosbank for a loan, which, if granted, will carry interest and be repayable on a strictly stated date. This is the loan account as opposed to the clearing account. Now if such a loan is according to plan, Gosbank will grant it; and even if it is not according to plan, Gosbank may do so, having first looked very carefully into the affairs of the enterprise to discover why it is in need of an unplanned loan. If there is good reason for this, the enterprise being delayed in production, for example, by the failure of others to deliver raw materials, then Gosbank will certainly help; or if this new enterprise is really to blame, but the best thing seems to be to give it the loan, then the known cases seem to indicate that Gosbank will find the money in that case too, but changes in the management of the enterprise may not be improbable. Furthermore, if the loan is not repaid at due date, Gosbank may charge the clearing account, which it can only touch otherwise with the authority of the enterprise or with special legal sanction.

The costs and selling prices of the enterprise will be so planned that it will make planned profits. On these it will pay taxes, but these, though second in importance in the taxation system as providers of Government revenue, are small compared with the chief tax which is a turnover tax paid by consumers in the retail price of consumption goods. Of the planned profits the bulk will remain after the payment of the profits tax, and will be placed to the credit of the enterprise at its investment bank. From there these sums will become available, as the next stage of the plan goes into effect, for further capital construction for the enterprise; but the sums arising from planned profits may be subject to additions if it is decided in the plan as currently modified to speed up the growth of the enterprise; or subject to subtractions, possibly amounting to the whole, if the planners decide to take the money for more urgent purposes of capital creation arising in other lines of production or in other places. These subtractions are usually in the form of borrowing, Government bonds being issued in exchange for

the credit-money. We may observe in passing that when profits reach the figure planned this does not arise from productive efficiency as we understand it but from efficiency being as great as planned, which may not be the same thing.

The enterprise may also make unplanned profits, that is, profits greater than the plan required: broadly speaking, these do represent productive efficiency greater than the average. Such unplanned profits are treated in the same ways as planned profits except that a part of them, and it may be a large part, can be devoted to the betterment, for instance in the matter of housing, of the workers in the enterprise concerned.

We may notice that the normal effect of inefficiency in any enterprise is to cause it to apply to Gosbank for an unplanned loan. That would occur in particular if production were taking longer than planned, which is assumed in the U.S.S.R. to mean longer than it should. But it may have to apply to Gosbank for a loan also if it is ahead of (and not behind) schedule. For in this case it may well be accumulating its finished output because of transport delays in forwarding this to the buyers, so that it will not have received payment for some of its output, whereas it requires to go on purchasing raw materials, etc., as before. In these circumstances, Gosbank will no doubt grant the (unplanned) loan requested. This suggests, however, the incidental reflection that any enterprise may find it better to keep to the plan rather than getting ahead of it, which is not good for efficiency. But the important point is that Gosbank is at all times placing a finger, so to speak, upon the millions of economic pulses which throb in the Soviet system: Gosbank acts as the ever-watchful inspector and overseer to see that economic activity is proceeding according to plan.

This is by far the most important function of Gosbank. It acts, indeed, as a clearing house and accounting system for the whole economic effort of the entire U.S.S.R.¹ And this function arises particularly from the provision of short-term credit, a service performed in other countries by commercial banks.

But Gosbank receives all payments of credit to, and disburses all payments of money from, budgetary accounts. In this respect it is acting like any other Central Bank as the agent of the Government (not of Government enterprises in this instance, but of the Government itself). Furthermore, it performs the creation (or destruction) of credit and currency, not at its own discretion, however, but according to plan. Yet it is Gosbank itself which prepares this plan. Enterprises send through the local branches or direct to the head office of Gosbank their estimates of future credit needs and future currency needs. These are consolidated by Gosbank into a credit plan and a 'cash' plan which are sent to the supreme planning authorities. When approved, or as amended, the credit plan becomes operational quarterly and the 'cash' plan on a monthly basis. In each the

¹ Some private enterprise persists in the U.S.S.R. but may be neglected for these purposes.

balancing item is an emission or withdrawal of currency.¹ The theory of the matter seems to be that the volume of money (credit and currency) should grow *pari passu* with the volume of output, so that money will precisely exchange against goods leaving a surplus of neither in the hands of their possessors (which would assume net stability in the various velocities of circulation). For the period of Russian participation in World War II and up to December 1947, as also in the period from 1928 to 1935, it might be said that the ideal process (not the policy pursued) was to keep the volumes of money and goods moving together so that prices as a whole remained stable, for some prices in those times were free to vary. But now practically all prices are planned and no excess of purchasing power will cause them to move. We are very poorly informed about the recent development of the Soviet system since most of the important statistics were not published after 1935; but there has been the recent large-scale cutting down of the volume of money together with specific pronouncements made at that time to show that the credit plan, and its annex the cash plan, have resulted, in fact, in a large measure of inflation over recent years. To this matter we will return.

But as we have described it so far there remain two leaks, so to speak, in the monetary circulation, both of them in the currency circulation. What happens if the people hoard currency, as, indeed, they have done in the past for the good reason that they could not find consumption goods on which to spend the whole of their incomes? This is a genuine leak from the monetary circulation which can be made good only by pouring more money into circulation from Gosbank. But what about currency placed by the public in the savings bank or its branches? Apart from a pool of currency kept for repayments, which is believed to be stable in volume, the currency goes back to Gosbank where it is exchanged for Government bonds which pay interest in favour of the savers. Thus currency placed in the savings banks does not constitute a leakage of money at all.

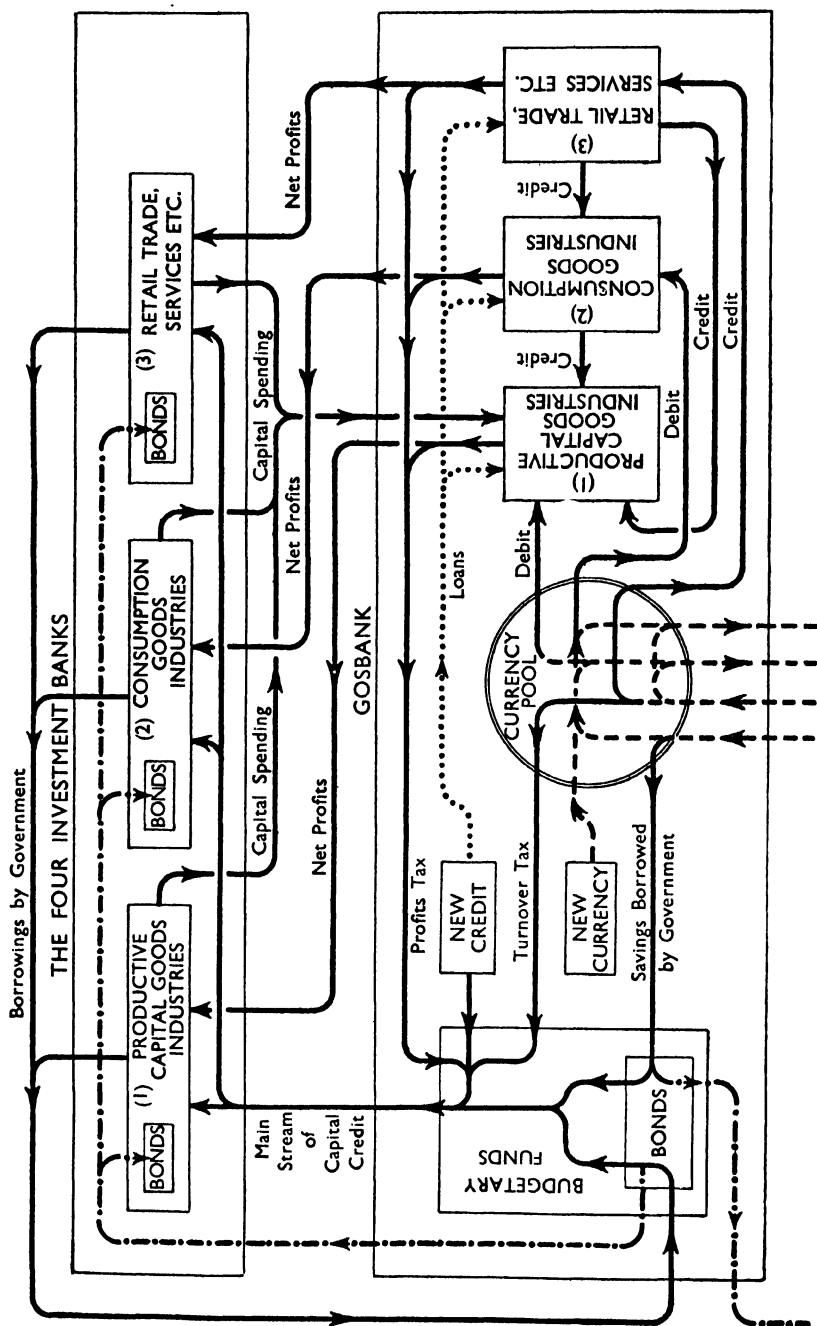
Although the Soviet monetary system is really a simple affair compared with those of capitalist or semi-socialist countries, the attempt to reduce it to a diagram produces rather a 'plumber's paradise' (see Illustration V) which may be too complicated to be serviceable even though a number of simplifications have been made.

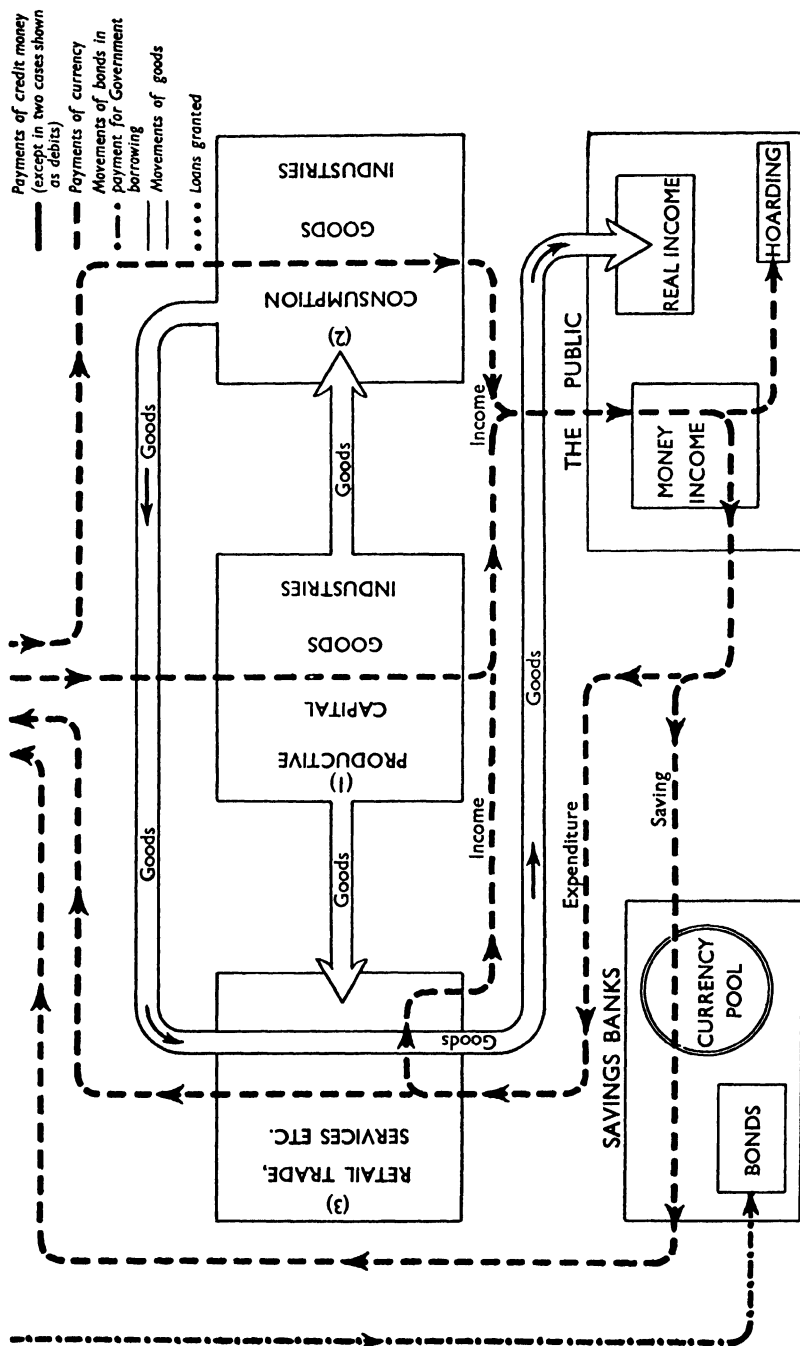
Simplifications:

1. The only stream of Government expenditure shown is the 'main stream of capital credit'; the Government has all the normal types of expenditure as well which a capitalist government has: payments for the armed services, for social services, interest (small, but not shown at all), etc.; in reality the five sources of budgetary funds do flow into these channels as well. These expenditures find their way as currency back to the 'currency pool' in Gosbank.

¹ In this respect see particularly A. Baykov, *The Development of the Soviet Economic System* (1947), pp. 412-66.

ILLUSTRATION V: MONETARY CIRCULATION IN THE U.S.S.R.





2. There are other taxes, but the two chief ones, amounting to about 75 per cent of tax revenue, are shown.
3. The 'currency pool' in Gosbank is made to give out streams of credit to Retail Trade or to the Government on the receipt of currency belonging to or borrowed by these: the reality is, of course, more complicated.
4. Retail Trade is made to provide itself with all the currency which it requires to pay its workers; this does not happen in all cases all the time.
5. Interest paid on loans and the repayment of loans are not shown at all; furthermore all loans are shown arising from 'new credit': that might not always be true.
6. The separation of all enterprises into three groups, (1) productive capital goods industries, (2) consumption goods industries, (3) retail trade, services, etc.: this is a gross over-simplification. There are examples of (3) belonging to (1) or to (2); of (2) belonging to (1) or to (3); of (1) belonging to (2), and possibly even to (3). The division of Soviet enterprises into 'Ministries (formerly Commissariats), which, anyhow, changes from time to time, is too complicated to admit an analysis so fearless. And even if this grouping is 'thinkable,' it would not be the case that goods flow only from (1) to (2) and to (3), and from (2) to (3).
7. No increase or decrease of the clearing accounts (working capital) of any enterprises from budgetary sources is shown.
8. All the investment funds are shown as being spent on the output of (1); in fact, some go to (2) if not to (3).
9. No distinction is made between planned and unplanned results in general; nor between the two sorts of accounts which enterprises have at Gosbank.
10. All governments are grouped together for the heading, budgetary funds.
11. No foreign trade is shown at all.

Thus it may be seen that, for all its complexity, Illustration V can be taken as only a very rough indication of the monetary system! But perhaps it will serve to indicate the great importance of Gosbank in the monetary system.

What then may be said of Gosbank in general? First, that it is (to change the metaphor) the chief watchdog of planning, which as we have seen is its most important function; second, that it is not only a mixed bank having central and commercial banking functions like the Bank of France, but that it is the only commercial banking system and that such operations in a fully socialist country are dominated by considerations of the plans; third, that it is not the bankers' bank for the simple reason that it is itself the bank and the bankers both; fourth, that except for some self-financing in currency by retail trade, services, etc., Gosbank is the sole source and controller of currency, as are most Central Banks; fifth, that it is the Government's monetary agent, like other Central Banks, but this is a much more onerous matter on income account dealings and a much less difficult duty on national debt account than in other countries; sixth, that it has no relations with the Money Market nor with the Stock Exchange since these do not exist; and finally, that it neither possesses nor needs normal Central Bank instruments of control such as Bank Rate or the power to conduct open market operations.

It would be possible, perhaps, for despotic socialism to organise a slightly different monetary system: it might be feasible to separate the central and the commercial banking functions, though there would be little point in doing so. But the essential features are the watchdog duties of the short-term credit authority and the repartition of investment funds through budgetary channels. It is difficult to believe that any other despotic socialist government could fail to copy the Soviet Government in these two matters.

The interesting question of what sort of monetary system would be found in a fully socialist state which remained democratic, raising as it does the further question of whether a fully socialist state could be democratic, must be left out of the present discussion.

In conclusion, let us review briefly the nature of the Soviet monetary reduction of December 1947. This was a fairly complicated measure comprising several clauses. First, currency notes (not coin) were replaced, 10 old roubles being exchanged for 1 new rouble.

Second, with exceptions, deposits in Gosbank and in the savings banks were converted from old to new roubles on a sliding scale as follows: for the first part of each deposit, up to 3,000 roubles, 1 old for 1 new; for the second part of each deposit, from 3,000 to 10,000 roubles, 3 old for 2 new; for the third part of each deposit, from 10,000 roubles upwards, 2 old for 1 new.

Third, as exceptions to the second provision, co-operatives and collective farms received the favourable rate of 5 old roubles for 4 new.

Fourth, State borrowings including savings bank certificates were consolidated and converted at the rate of 3 old roubles for 1 new; but two exceptions were made, a loan of 1947 being left at its nominal value and a lottery loan of 1938 being converted at 5 : 1. All other obligations of Governments and enterprises remained unchanged.

At the same time rationing, Government ration stores (or 'closed' stores) and the Government black market (known as 'commercial' or 'open' stores) were all abolished and a single system of stores (in the same buildings) replaced the former ones; a change-over from a rationed to a non-rationed economy had, of course, taken place before, in 1935, but the earlier occasion did not necessitate a drastic monetary reduction.

It is somewhat misleading to describe the Soviet's financial operation, as was done at the time, as devaluation. Devaluation means a reduction of the gold content of a monetary unit, or more widely a reduction of its worth in relation to some other standard previously existing. The only sense in which this operation was devaluation was that old roubles and some old rouble values were devalued in relation to other old rouble obligations and in relation to wages which began at once to be paid at the old rates but in new roubles. It is better to describe the Soviet Government's measure as a combined capital levy and levy on currency. Both parts of it were discriminatory. But before touching briefly upon the discrimination, the nature of which is not all quite obvious, let us first consider the reason requiring this monetary reduction.

The Soviet Government itself explained the reason, but however perfectly that explanation may read in Eastern Europe and Siberia, to outsiders it can only appear as a cloth of truth bordered with falsehood; or of understanding fringed with error. It was quite true, or correct, to point to the excess of money and the diminished supplies of consumption goods as the reasons for the high prices in the 'commercial' stores and in the collective farm markets. It was also correct to say that a similar inflationary increase in money had occurred in other belligerent countries; and if it be argued that a despotic Government could have put up prices in ration stores or decreased wages, or both, during the war instead of financing its needs with new money, the same might be said of other governments, which become somewhat despotic in wartime even in the countries normally most democratic. It was correct also to suggest that the surgical operation performed on the volume of money was preferable to a slow deflation, such as has occurred in the past in other countries; though the implication that a slow deflation in the U.S.S.R. would lead to unemployment and falling real wages is without foundation. Planned profits sound more successful than planned losses, of course. Again, the allegation that the rise of prices was due to speculators was a half-truth. The Government's inflationary policy was responsible for their existence; in any case commodity speculators in the U.S.S.R. as elsewhere perform a useful service to the extent that they are right. Furthermore the statement that "German and other invaders" used forged roubles and thereby increased the monetary circulation is a little odd. Unless it was the case that the Germans captured and used stocks of the paper and part of the Gosbank apparatus for producing notes (in which case the notes were forged in one sense and not in another), this statement too is somewhat lacking in truth content; for it is a poor Central Bank that does not know its own notes. Was the fact of the matter really that the repudiation of forged notes would have brought losses of a haphazard nature to all sorts of holders, thus conflicting with a planned economy?

However these latter points may be, the most important matters are not in doubt; inflation was the easiest way in war even in the U.S.S.R., and the Government used it. The result was excessive demand. Of whatever political leanings, anyone can think of excellent reasons for the abolition of rationing, though not everyone, perhaps, would conclude that the same reasons moved the Soviet Government. To bring rationing to an end, as the Decree of 1947 truly said, the monetary bulge had to go, otherwise the late comers at the shops doing 'open trade at unified prices' would have gone without. So with the drastic speed characteristic of the Soviet Government and with discrimination of a kind not so true to the Kremlin's form, the bulge went.

Some of the discrimination was simple enough. Those who hoard currency have never been looked upon with favour in the U.S.S.R. They suffered the most. Persons who had deposits in the savings bank did much better, and the occasion was taken to make an egalitarian redistribution

of wealth among them. The very existence of the savings bank shows that in the Government's view money saved should be lent to the State, and many official pronouncements have indicated this too. But we should observe that the Gosbank depositors, namely the Government enterprises, also suffered a reduction. The reason would appear to be that wartime bonuses for production had led to unplanned profits which were held as working capital, which the planners found to have become excessive, whereas any sort of profits converted to the investment banks could be borrowed by the State in any case.

It would be interesting to speculate at length as to why co-operatives and, above all, collective farms were treated so well. Has the Soviet Government relented at length towards the agricultural population? But the most probable answer is simple and can be stated shortly. It is likely that these, particularly the collective farms in relation to the number of people whom they comprise, had small holdings of money.

The only interesting point about the levy on the State debt is the flat, proportional rate (omitting the two exceptions); no attempt was made to discriminate between large and small holders so that the poor might pay at a lower rate and the rich at a higher one. But as Government enterprises were almost certainly the chief holders, the reason for such inequalitarian procedure does not seem to be a very dramatic one: it was only a matter of writing down the resources in one State pocket so that those in others might become relatively greater.

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LENDING AND BORROWING: THE JOINT-STOCK BANKS AND THE CAPITAL MARKET

The Joint-Stock Banks have grown partly by amalgamation; but further amalgamation is controlled by the Government.

IN Chapter VI we made a preliminary survey of monetary institutions, including the Joint-Stock Banks from which we selected the most important, namely the London Clearing Banks, for special though brief attention. It is desired now to look a little more closely at the whole system whereby our economy functions upon the strength of other people's money: for this purpose we must return first to the Joint-Stock Banks and then to the capital market. We may begin by touching very briefly upon the growth of the Big Five, these being the outstanding commercial banks. The manner in which the Big Five English Joint-Stock Banks were founded and have grown has been somewhat different in the individual cases.

The history of Barclays Bank begins as early as the seventeenth century with various private banks of issue, but the present institution really dates from only 1896, when some twenty private bankers, members of the Society of Friends and related by marriage, amalgamated their businesses in a single joint-stock enterprise.

Besides the name of Barclay, other names famous in English banking are connected with this bank, such as Gurney, Backhouse and Bevan. The early business of the bank was done largely in East Anglia and Yorkshire, with important connections in London. Over the turn of the century amalgamations and absorptions occurred, particularly designed to spread the business throughout the country; at the same time the number of its branches increased. Like other leading banks Barclays grew rapidly during and just after World War I, becoming amalgamated in the years 1916–19 with four important joint-stock banks, namely the United Counties Bank, the London Provincial and South Western Bank (itself an amalgamation), the British Linen Bank (a Scottish company), and the Union Bank of Manchester. Barclays Bank possessed in its own name on 30 June 1948, 2,015 branches; and a further 198 offices were then possessed by the British Linen Bank. There were also three comparatively small subsidiaries: Barclays Bank (France) Ltd. with thirteen offices; Barclays Bank (Canada) with two; and Barclays Bank S.A.I. in Italy, having one office. In addition, as a very important subsidiary, Barclays Bank, Dominion, Colonial and Overseas, had on that date 561 offices. Thus the

grand total of offices reaches 2,791.¹ Evidently Barclays is a large bank both in Great Britain and abroad.

Lloyds Bank was formed in 1865 from two private banks in Birmingham, of which one, Lloyds & Co., began business in 1765. Its early growth was in the western Midlands, but it acquired London connections of importance within twenty years, gained a considerable connection in the south-west in 1892, and absorbed the Liverpool Union Bank in 1900. Lloyds Bank grew rapidly during World War I and in 1918 it was amalgamated with the Capital and Counties Bank which had nearly five hundred branches; in 1918 also it acquired the National Bank of Scotland which now possesses nearly two hundred branches. Other post-war absorptions were the West Yorkshire Bank in 1919; in 1921 Fox, Fowler & Co. of Wellington, Somerset, the last private bank of issue; and Cox & Co., the Army bankers, in 1923. Like others of the Big Five, Lloyds Bank has business all over the country. On 30 June 1948 it possessed 1,685 branches.¹ It is also part owner of Lloyds and National Provincial Foreign Bank, and it has a controlling interest in the Bank of London and South America (seventy-two offices). A still more important affiliate is the National Bank of New Zealand (103 offices); whilst the Bank of British West Africa is a connection of somewhat less importance. In all this group also has more than two thousand offices.

The Midland Bank was also founded in Birmingham, in 1836 as a joint-stock company. Its rapid expansion began in the last two decades of the nineteenth century, first in Birmingham and the western Midlands and then in London. Just before World War I its business in Wales was extended by two absorptions; in 1917 it took the first step in acquiring the Belfast Banking Co. (now possessing eighty-seven offices); in 1918 it was amalgamated with the London Joint Stock Bank, a large concern; and after World War I it spread important connections into Scotland by acquiring the Clydesdale bank in 1920 (now having 190 offices) and the North of Scotland Bank in 1924 (which has now 177 offices). We may say that the growth of the Midland Bank has occurred through the creation of branches and through fewer and larger scale amalgamations than have marked the history of others of the Big Five. On 30 June 1948 the Midland possessed 2,025 branches in its own name,¹ but it has no subsidiaries outside the United Kingdom (excepting a subsidiary in the Channel Isles of its Executor and Trustee Company). The Midland Bank has a large business relating to foreign trade and foreign exchange dealing, but its policy has always been in all parts of the world to deal through other banks which remain independent in acting as the Midland Bank's local agents, and not through subsidiaries nor banks under its own control.

The National Provincial Bank has a dual origin, as a Joint-Stock Bank issuing notes in Gloucester and elsewhere, dating from 1833, and as a London joint-stock bank without the right of issue, founded in 1839. These two parents, the National Provincial Bank of England and the

¹ The Economist Intelligence Unit, 1948.

Union of London and Smiths Bank, were united as recently as the end of 1917, by which time they were both large organisations possessing many branches. In 1917, 1918 and 1919 considerable banks in Yorkshire and Nottinghamshire were acquired, and extensive connections in the south-west have also come from amalgamation. In 1920 the National Provincial Bank purchased control of Coutts & Co., which is older than the Bank of England and which, maintaining its separate name, is as we have seen a member of the London Clearing in its own right. Since 1924 Grindlay's Bank which does business in London, India, Pakistan, Burma and Ceylon has been associated with the National Provincial Bank. Otherwise it has the joint interest with Lloyds Bank in their European banking house. The National Provincial Bank had 1,231¹ branches on 30 June 1948 and is without affiliations in Scotland or Ireland.

The Westminster Bank has a triple origin in three London joint-stock banks, the London and Westminster Bank, founded in 1834; the London and County Bank set up in 1836; and Parrs Bank incorporated in 1865. The first two were united in 1909, and the third was joined to them in 1918. As well the Westminster Bank acquired extensive connections by amalgamations in the West, the Midlands and Yorkshire, in addition to the normal creation of branches of its own elsewhere. On 30 June 1948 the Westminster Bank possessed 1,051 branches;¹ it also holds control of the important Ulster Bank which has 192 offices and its own Westminster Foreign Bank operating in western Europe.

Of the other members of the London Clearing we have said a few words in Chapter VI.

Two principal points emerge from these scanty details of the origins and growth of the Big Five. In the first place it would be quite erroneous to suppose that these great banks are as a whole institutions belonging primarily to the metropolis which have put out tentacles all over the country. The Big Five among them have their local origins all over England and Wales; and their affiliations in Scotland and Northern Ireland were and remain home growths. This matter bears upon one of the criticisms commonly made against the commercial banks in general.

The second point to observe is the rapidity and the large scale of amalgamation at the end of World War I and just afterwards. Some disquiet was felt that too great a concentration of financial power might come about; with the result that, at the instance of a Treasury Committee appointed in 1918, a Statutory Committee was set up whose approval must be obtained for all further banking amalgamations and schemes of control. We shall touch in a little upon the question of bank competition to which this Government control is relevant.

Banking crises and failures have helped to shape the development of our commercial banks.

The dates at which some of the parent institutions of the Big Five were

¹ The Economist Intelligence Unit, 1948.

launched reflect the crises of the early nineteenth century. The great crisis of 1825, when so many of the small note-issuing banks failed, led to the passing in the following year of an Act permitting joint-stock banking outside the London area. This was followed up in 1833 by permission for Joint-Stock Banks to be set up in London but without the right of note-issue. It is the latter measure whose influence we can see so clearly, for example, upon the beginnings of the Westminster Bank.

We ought to look upon this Act as causing the growth of the cheque-deposit system, and not regard the growth of the Joint-Stock Banks as deriving from their practice of the superior cheque-deposit technique. These banks superseded the small, private, note-issuing ones by virtue of their greater size, wider spreading of risks and better management. The technical system of cheque-deposits (admittedly superior in many respects) prevailed with the banks, rather than the banks with the technical system.

The legal safeguard of limited liability was not applicable to banks until 1858; before then, it was felt that depositors were not adequately guaranteed unless the whole of the private fortunes of the partners lay in the background as security for deposits left with them. The extension of this liability to shareholders in Joint-Stock Banks was of questionable wisdom, and the possibility after 1858 of relief from such a severe risk was a change for the better. This unlimited liability did not appear as a burning issue, however, until twenty years after the passing of the Act. The firmly established banks seem to have thought that it would have been undignified, and perhaps damaging to their prestige, to re-register themselves as limited liability companies. In 1878, however, the City of Glasgow Bank foundered, a fraudulent wreck, and the shareholders were called upon for some 2,200 per cent of the nominal value of their shares: absolute ruin was widespread in the west of Scotland. Thereupon bank shares became almost unsaleable, and the Joint-Stock Banks in general had perforce to adopt limited liability.

*The distribution of his assets is the essence of the banker's business:
a comparison of the position of the Clearing Banks before and after
World War II throws some light on this matter.*

Let us first make a comparison between some date shortly before World War II and a recent date in order to observe the changes which have occurred to the Clearing Banks. Then, having given some little explanation, we may consider what conclusions seem to be warranted.

As a pre-war example, avoiding the time when the war cast its shadow before it, we may take January 1937, which was a time of recovery from depression and thus, in the eyes of those days, a stage upon the road to satisfactory normal conditions. To-day, too, we hope that we are on the way towards satisfactory normal conditions, leaving behind years of human disaster and economic buoyancy very different from the times of social and economic misfortune which preceded 1937. Yet in that both dates have the atmosphere of points on the path to normality, the comparison has the more validity. We may recall too that 1937 was in the heyday

of the Gold Reserve Standard; this is not obviously revealed by the figures of the Clearing Banks, but that system had its influence upon their business, and something like it may well operate again in future.

Be it noted that the figures of January 1937 were arrived at by averaging weekly figures for the different Clearing Banks, whereas those of a recent date are the figures of a particular day, 30 June 1948.

TABLE XX
LONDON CLEARING BANK BALANCES IN JANUARY 1937
AND ON 30 JUNE 1948

	ASSETS			
	January 1937		30 June 1948	
	£ 000,000	Per cent of whole	£ 000,000	Per cent of whole
(1) Coin, bank notes and balances with the Bank of England ...	237.7	9.3	492.4	7.8
(2) Balances with and cheques in course of collection on other banks in Great Britain and Ireland	59.7	2.3	218.8	3.4
(3) Items in transit	4.5	0.2	14.2	0.2
(4) Money at call and short notice ...	179.4	7.0	473.2	7.5
(5) Bills discounted	345.1	13.5	658.8	10.4
(6) Treasury Deposit Receipts ...	—	—	1,360.5	21.4
(7) Investments	669.3	26.2	1,478.1	23.3
(8) Advances to customers and other accounts	880.0	34.4	1,340.1	21.1
(9) Liabilities of customers for acceptances, endorsements, etc.	110.6	4.3	242.8	3.8
(10) Bank premises account ...	44.6	1.7	40.6	0.6
(11) Investments in affiliated banks and subsidiary companies ...	23.5	0.9	27.9	0.4
	2,554.5	100	6,347.3	100

LIABILITIES				
(1) Capital paid up	77.3	3.0	78.2	1.2
(2) Reserve fund	57.8	2.3	70.8	1.1
(3) Current, deposit and other accounts	2,307.2	90.3	5,954.5	93.8
(4) Acceptances, endorsements, etc.	110.6	4.3	242.8	3.8
(5) Notes in circulation	1.4	0.1	1.0	—
(6) Reduction of bank premises account	.3	—	—	—
	2,554.5	100	6,347.3	100

Examining first the totals of assets or liabilities we may observe that the effect of World War II has been to multiply by about two and a half the scale of business of the eleven Clearing Banks. This is, of course, the sort of thing which we should expect to result from a long period of inflation. We should suppose that there would be some rough correspondence between this increase to about 250 per cent in bank resources and the

increase in prices; that the two changes would be in the same direction and of the same order of magnitude; and, in fact, they are; recalculating by simple approximation the Board of Trade wholesale price index on the basis of January 1937 = 100, we find that June 1948 = 216.1. The discrepancy is fairly large and there are many reasons for it; but the two figures are not seriously discordant. If the inflation had brought into being a new set of banks, or if the Bank of England had begun to do commercial banking operations on a large scale like the Bank of France, or if some other great change had occurred in our financial institution, then, of course, we should neither expect nor find the rough correspondence which exists between the figures given; but, in fact, no such great changes have occurred. On the contrary, there were eleven Clearing Banks doing the great bulk of the commercial banking business in England and Wales before World War II, and there are the same eleven still in the same preponderant position. We may notice also that nothing resembling the banking consolidation which marked the close of World War I has occurred this time.

Turning to examine the individual entries, first on the assets side, we see a fall in the proportion of 'cash.' But 'cash' as an indication of the liquidity of banks is calculated not with reference to the total of liabilities but in relation to the current, deposit and other accounts, to which it is more precisely relevant. On this basis the proportion for January 1937 was 10.3 per cent, and for 30 June 1948 8.3 per cent. Here, straight away, is a considerable change apparently, a reduction in the cash ratio of nearly 20 per cent. But, in fact, the change has been of small size. The explanation lies in the practice of 'window-dressing' which the banks used to carry on. The Clearing Bank figures for a month were the average of four or five weekly figures. But the Big Five took their weekly figures on four different days in the week, and altered their assets by varying their lending to the Money Market, each swelling its cash for its own make-up day; so that part of the cash was "a stage army"¹ appearing in one bank balance sheet after another: the same sum, about £25,000,000 in 1937, appearing four times in the week among the assets of different banks, once for each of the four different make-up days. Thus the real ratio in 1937 which would have appeared if all the banks had had the same make-up day was about 9 per cent and not 10 per cent or more. And the change in this respect has not really been a decrease in the cash ratio by 20 per cent but about $7\frac{3}{4}$ per cent, which is a small affair.

The reason for the window-dressing was that 10 per cent had become the traditional figure for the cash ratio. As the cheque-deposit system grew and the use of currency declined relatively, the banks no longer required 10 per cent of cash; but they did not like to depart from an established convention, although they were aware that their ability to supply currency was safeguarded, quite adequately, with a wide margin of safety to spare by a lower ratio. They did not want, of course, to keep more cash than necessary because cash earned nothing for them; so they compromised,

¹ J. M. Keynes, *A Treatise on Money* (1930), vol. II, p. 56.

foregoing the interest which might have been earned on one day in the week so that they might appear to be careful, conservative bankers maintaining the ratio of 10 per cent, or more, traditionally considered safe. It was rather absurd. The authoritative Macmillan Committee in 1931 used these chill words about window-dressing: "We are not aware that these practices serve any useful purpose. We think that they are not creditable to our banking system; and we recommend that they should be given up at once."¹ At once they were not, however. Not until the end of 1947, sixteen and a half years later, was window-dressing at length abandoned, having reached quite absurd proportions during and after World War II.² The real reduction of the cash ratio from 9 per cent to 8.3 per cent is, of course, easily justified by the further relative growth of the cheque-deposit system since 1937.

The second item of the assets, balances with and cheques in course of collection on other banks in Great Britain and Ireland, may be considered for the Clearing Banks as a very liquid asset; but for the banks of Great Britain and Ireland as a whole they are about to become liabilities as well as being currently assets, of course; so that this item is not really almost as good as cash. However, it is such a small item that this matter is not important, and the large increase which has taken place in it since 1937 is not significant either: it remains a minor item necessary in the transaction of financial business. The same may be said of the third entry, items in transit, which is a heading used by Lloyds Bank alone. This happened on 30 June 1948 to be (correct to one place of decimals) at exactly the percentage of January 1937.

Money at call and short notice, the fourth entry among the assets, does have importance, however. This consists of funds lent to the Money Market at very low rates of interest. Now if the Bank of England desires to contract credit it can do this by decreasing its assets and liabilities. The method which became well established between the two World Wars was for the Bank to sell government securities on the open market (i.e. on the Stock Exchange). Payment took the form of decreasing the liabilities of the Bank to one (or more) of its customers. This customer we may assume to be a Clearing Bank, for the effect is similar if some other customer is in question. Thus the open market sale deprives a Clearing Bank of cash; this it will proceed to make good at once by calling some of its loans from the Money Market. If the Bank of England is operating on a large scale so that several of the Clearing Banks are all calling at once, then the Discount and Acceptance Houses may be hard put to it to borrow the money which they need for their business. But there is always the Bank of England. Anyone in the market can always rediscount approved bills with the Bank, but the rate may be Bank Rate. If Bank Rate has been standing, as is normal, above market rates, the forcing of the market 'into the Bank' will cause losses to those compelled to borrow there, for

¹ Cmd. 3897, 1931, para. 370, in part.

² See *The Economist*, 14 December 1946, pp. 961-5; and 11 January 1947, p. 82.

they will have charged their customers a lower discount rate and be forced themselves to concede a higher one. Thus market rates will move up to, or almost up to, Bank Rate. This is the classic Bank Rate technique, of course, particularly suitable for contracting credit, whereby the Rate is made effective by open market operations. And we see that it works through the cash and the money at call and short notice belonging to the Clearing Banks. To them, therefore, their funds lent to the Money Market are their first auxiliary troops. So soon as there is a drain for whatever reason on cash, the loss can be made good almost at once by calling these loans. Experience has shown that 7 per cent is about the ideal proportion for money at call and short notice. We may notice that in January 1937 the figure was exactly 7 per cent and on 30 June 1948 7.5 per cent, a negligible change.

The fifth entry, bills discounted, consists of Treasury Bills, international trade bills and some inland bills, sometimes including hire-purchase paper. These might be described as third-line troops on the average. Treasury Bills have a life of three months and probably the banks hold a negligible quantity of other sorts of bills having longer usance. Thus, if there is an equal spread of bills throughout the three months, on the average the whole of this item will have about six and a half weeks to run before repayment, with about one-thirteenth of it being transformed into cash week by week. Actually it is known that in the past a disproportionately large amount of bills discounted had very much less than six and a half weeks to run. Big maturities of bills due within a week or two weeks are, of course, almost as good as money at short notice as affecting the liquidity of a bank. The huge figure of nearly £660 million of bills discounted is thus a factor of strength in the ability of the banks to meet any calls upon them for currency. Yet we should notice that this item has fallen quite a long way as a percentage, from 13.5 per cent to 10.4 per cent. Before World War II the former figure was not far below normal, so that the present relative contraction is unusual. The explanation of it is to be found in the next item.

Treasury Deposit Receipts, the sixth entry, are something new. These began as six-month borrowings by the Treasury from the commercial banks in July 1940. They were an instrument designed for war purposes to help in the collection of all the available purchasing power into the hands of the Government. Nearly all of this borrowing has fallen on the Clearing Banks. From May to October 1945 the amounts outstanding averaged continuously over £2,000 million, whereas the Clearing Banks had average holdings of a little under that figure. Thus there has been a substantial reduction in T.D.R.s. It is not unlikely that future budget surpluses may be used to reduce the amount still further, even to vanishing point in time. In June 1948 the Treasury, accepting in part suggestions from the Money Market, changed the usance of T.D.R.s; now instead of being always of six months, they will be sometimes of five, sometimes of six and sometimes of seven months. This change is intended to permit an offsetting of the

irregular receipts of revenue by the Government so as to avoid periodic stringency in the Money Market. From the point of view of the commercial banks, there is no fear of loss being incurred on T.D.R.s which will be on the average within about three months of repayment in any case. But there exists only a small market for these securities outside the banks themselves, so that as liquid assets the commercial banks may not find them entirely satisfactory.

The seventh item, investments, consists largely of Government bonds, probably now as in the past with a bias towards securities nearing their repayment date. The increase has been large, but the proportion has actually decreased. What a difference here between the Clearing Banks and the commercial banks in the United States!¹ Although upon reaching investments we have come among the less liquid assets of the banks, there is probably no need at all to fear that, in the event of interest rates advancing, the Clearing Banks would have to sell a single Government bond: their position is so strong that they could hold these quietly in their possession until the day when they became due, block by block, for repayment; thus the Clearing Banks would realise no loss from their investments in Government bonds. None the less, even the present lower proportion may be higher than they like. In the past, 12 per cent to 15 per cent has been agreeable to them and something between those figures and the present 23·3 per cent might suit them better. Yet if a decrease of T.D.R.s is to be looked for it will not be easy to avoid an increase in investments.

Advances to customers and other accounts (the eighth entry) are the best earning assets which the banks have. It is on these alone that they earn anything appreciably above the pure long-term rate of interest, which may be taken for practical purposes to be the yield on Consols. It is here, too, of course, that banks incur a credit risk of bad debts. The normal period for loans is six months, but many loans are renewed almost automatically; and overdrafts may be outstanding for years. We may observe that, with the exception of bills discounted, which have increased over 90 per cent, every other major item of the assets has gone up more than 100 per cent since 1937; but advances to customers and other accounts have advanced only 50 per cent, and have fallen as a proportion by more than a third. Even the 1937 figure of 34·4 per cent was undoubtedly lower than the Clearing Banks would have liked, and the present figure they might well like to see doubled. Yet a really big change of this sort is not to be looked for in the near future, if only because financial policy is set, a little timorously still perhaps, towards disinflation. It may well be that commercial banks in general will have to resign themselves to a percentage of advances looking very modest compared with the old idea that half the assets should take this form.

The liabilities of customers for acceptances, endorsements, etc., is a self-balancing item occurring also among the assets; it relates chiefly to foreign exchange operations.

¹ See Chapter XV.

We may look with some surprise on the decrease in the bank premises account. Considering the advance in the value of buildings between 1936 and 1948, this decrease, although the matter is not quite simple, must, in fact, conceal assets of a size much greater even than they were before. All good banks have hidden assets! Clearly, however, among the assets this is not an important item, and it should not be so.

Neither is the last entry of great importance. These permanent investments probably understate the resources of the banks by a considerable margin also.

By comparison, the liabilities are simple and need detain us for only a short time. There has been a slight increase in the combined figures of capital. The Midland Bank increased its capital by just under £1 million in 1937. But as a proportion, the total of capital has shrunk notably. This should not be regarded as a serious matter. If a bank has sound assets, distributed so as to give adequate liquidity and to spare, it has no need for a large capital.

The combined reserve funds of the Clearing Banks have advanced as we should expect after some eleven years of rapid growth. Three of the eleven banks have a reserve fund actually exceeding their capital; in the case of four the reserve fund equals or virtually equals the capital; and in the case of the remaining four their reserve funds are slightly less than their capitals. We may expect the aggregate of reserve funds in time to pass the total capital.

Current, deposit and other accounts are, of course, practically the whole of the liabilities of the Clearing Banks, or for that matter of commercial banks in general. Their growth has been both absolute and relative. This is the result of inflation, in particular of Government borrowing from the Clearing Banks.

With acceptances, endorsements, etc., we have already dealt among the assets. And notes are a minor matter: over 90 per cent of them are notes of the National Bank circulating in Ireland.

But when we have considered all the changes and observed all the relative alterations in the importances of different items, the main conclusion emerges that inflation has altered the scale of the business of the banks, and little else. The two basic principles of commercial banking, sound assets and adequate liquidity, are obviously unaffected by the inflation or by any other changes. And even the distribution of the assets and liabilities is very much as it was. We may conclude that the Clearing Banks had before World War II a system of distributing their resources which was sound in that it earned for them a handsome income, and yet provided liquidity enough and to spare; it was a system worked out with some exactness as to the proportions of different assets which were best to keep, and yet flexible enough to enable them to adapt their business to great changes. The system goes on substantially unaltered by all that World War II has done to our economic life.

Small traders used to criticise the lending policy of the commercial banks.

The complaint used to be heard frequently before World War II that the commercial banks failed to provide adequate credit facilities for small traders, but had always enough funds available for large-scale enterprises. The latter part of the statement was and is undoubtedly true; the former part turns on the meaning of the word, adequate. If the complaint be interpreted to mean that small business men could not get all the credit which they wanted, then it is true. But if it is taken to indicate the amount of credit which it would have been a reasonable banking risk to extend to these men, that is another matter. The first point to make, certainly with reference to the past, is that the big firm usually can and the small one often cannot put up suitable collateral in the form of Government bonds, sound industrial shares or something of that sort. Probably no single person knows to what extent in the past two decades or so our commercial banks have given loans or extended overdraft facilities without attaching to themselves as a pledge some fairly liquid asset of the borrower. But it is clear that there are cases where it is reasonably safe to do this for firms of some size, whereas it would not be a reasonable risk for the banks to do the same for a man of equal honesty and undoubted integrity who was in a small way of business. No one should blame the banks for being cautious about lending to small men without collateral: the incidence of bankruptcy among small shopkeepers, for example, is too great to admit of much lending on their good faith and ability; all too many fail although both honest and hard-working.

On several dates between 1929 and 1937, some 14½ per cent to 15 per cent of the advances of the London Clearing Banks went to "miscellaneous trades (including retail trades)."¹ This is only a very rough indication, indeed, of the proportion of loans received by small borrowers. Yet whilst there certainly were small business men included under other headings—to what extent we do not know—loans in this category probably consisted to a large extent of advances to small businesses, and comprised a large part of all such lending. As a rough comparison we may observe a trend which has begun to take shape quite recently.

Since 1946 banks which are members of the British Bankers Association have increased very much their loans to retail trade. This group consists mainly of the London Clearing Banks but includes others as well.² In February 1946, out of total advances of £848 million, £62 million or 7·3 per cent went to retail trade. In May 1948, out of total advances of £1,351 million, the amount and proportion borrowed by retail trade were £141 million and 10·4 per cent. So in two and a quarter years the advances to

¹ As to the turn of the year 1929–30, Cmd. 3897 (*The Macmillan Report*), 1931, p. 298, Table 8; as to later dates, the Economist Intelligence Unit, 1948.

² Seven other English banks, eight Scottish banks, seven Irish banks and some twenty-nine overseas banks.

retail trade have more than doubled, and the proportion has increased by little short of 50 per cent. One still does not know how much of this category of borrowing is done by large firms; but there is little doubt that retail trade is the group of borrowers most representative of the small business-man.

It does appear, therefore, that the banks in general have been doing a lot more recently to accommodate the small man. Has there been any change which would reconcile this with the pre-war complaints? We may dismiss the idea that the banks might have had a change of heart. They are just as apprehensive of bad risks as they were. What may well have changed, however, is the ability of borrowers to produce collateral. The war inflation enabled a lot of people to save, since in numerous occupations including the armed services they earned more than before and the shortages of goods left them with little opportunity for spending; furthermore, taxation did not bear so heavily on the small saver. Thus there is a presumption that if small retail traders are wanting to borrow, many of them can furnish collateral now, and therefore can be granted the advances, who could not provide collateral before World War II, did not receive the advances which they sought and therefore became the authors of complaints against the commercial banks.

Another complaint against our big banks might be described as head-office-phobia. Particularly in small centres of population, but more generally anywhere outside London, the criticism might be heard from time to time that the Big Five especially gathered up the people's money from all over the country to lend it in the metropolis. The theme was suitable for, and received, the most elegant and fanciful embroidery. To a large degree this is the same complaint as that of the small trader all over again. But it is not true, as we have seen, that the banks belong essentially to London; they have roots throughout the country, and are concerned for the welfare of the whole. Yet it is the case that there are great numbers of credit-worthy borrowers in the large towns and especially in London. Furthermore, the banks must keep a large portion of their assets liquid, and all the day-to-day borrowing occurs in large towns, again the bulk of it in London. For the rest, the answer to the small trader's complaint applies.

It may be interesting to note that by far the largest group of borrowers from the banks members of the British Bankers Association is that described as personal and professional. People of this category received in May 1948 advances of some £363 million out of total advances of £1,351 million. Their aggregate was larger than the sum of the next three groups, namely, retail trade, upon which we have touched; agriculture and fishing; and engineering, etc. Over half of the advances, however, were on that date those to industrial enterprise in a narrow sense excluding the professions, financial enterprises, local governments, public utilities, churches, etc.

Rates of interest charged by banks for advances have also been criticised.

What is perhaps a more substantial complaint against our commercial banks touches their lending rates for loans or overdrafts. The banks' interest charges naturally seem to be more onerous to borrowers in times of depression when turnover is small than in times of prosperity¹ like the present when business is brisk. Before World War II, for example, even in the years of recovery, when the yield on Consols was at about 3 per cent, Bank Rate at 2 per cent, day-to-day money at $\frac{1}{2}$ per cent and Treasury Bills at little more, then a rate of 4 per cent to 5 per cent on advances seemed excessive. All these rates have been much the same since World War II, but few complaints are heard. However, a future recession of business might well lead to the same criticisms being voiced again.

Bankers used to answer these criticisms by showing that their profits were made from a very small margin over costs. When the relative shrinkage of the banks' capital is recalled, it will be seen that the margin is obviously much smaller to-day. What was said in this way to justify banks' lending rates was, of course, true; but it did reveal plainly the awkward problem which the banks faced. As a long-term rate free from the risk of default in the payment of interest, the yield on $2\frac{1}{2}$ per cent Consols may be used as an illustration. If this yield is 5 per cent, and banks are charging good customers 6 per cent, the difference is hardly worth the time of their customers to bother about. Such a relationship has existed in prosperous times in the past. But if the yield on Consols has fallen in depression to little more than $2\frac{1}{2}$ per cent, and banks have lowered their lending rates only to 5 per cent, that is a difference well worth worrying about. In the first case many customers would cheerfully put up Consols or long-term Government bonds as collateral for a loan, receive their 5 per cent, pay 6 per cent and offset one against the other, and the hope of capital appreciation on the collateral easily compensated them for any difference in interest. But to receive at $2\frac{1}{2}$ per cent, pay at 5 per cent and have little or no hope of capital appreciation but a strong presumption that sooner or later capital depreciation of the potential collateral is certain: all these factors lead in many cases to different action on the part of potential borrowers. It is particularly those having good bonds for collateral, and those who are in a large way of business also, who find in the conditions described that it is better to sell the bonds and use the proceeds for the purposes for which they contemplated borrowing. It is unpleasant for the banks: some of the fairest sheep go astray just at the time when they are wanted most. And it can hardly be otherwise than that this defection of the cherished tends to harden the rates for others.

In justifying the rates which they charge bankers have sometimes asserted that competition among themselves assures the best possible service for the public including the business world, in interest rates as in other matters.

¹ This expression is used to refer to employment and not to consumption.

In so saying they come near to falling into a trap prepared inadvertently for the unwary by economists of an earlier age. For the competition which must reduce prices and so serve the public interest is not that among a few semi-monopolists, which is what the banks are. Competition among such oligopolists *may* reduce prices; on the other hand it may not. Furthermore, competition whether among many or among few may have its own wastes; and oligopolistic supply, of loans or anything else, may include a fair measure of semi-monopolistic profits. When we find the competing banks all charging the same rates for advances sought in similar circumstances on the one hand; and on the other hand spending large sums upon opening new branches, splendidly housed and equipped, in places where one bank, with perhaps double the staff, could perform perfectly well the business done by four or five branches, we may feel a little sceptical about this competition. But the matter is not quite simple. Concerning bank branches, it is cheaper to buy land when a locality is in infancy than when it has grown to such size that it clamours for banking services. Furthermore, much of bank building between the World Wars was done at a time when it would have been better for the community to have men employed on building pyramids rather than being unemployed as so many were. Indeed, the loss to the community from the wastes of competition among banks, from any excessive luxury in which they may have indulged, may be dismissed out of hand: as likely as not it did more good than harm; and the same would be true again in similar circumstances.

But the matter goes deeper than we have suggested so far. By reason of human frailty, existing perhaps in greater or less measure on both sides, a man, be he borrower or not, may quarrel with his bank manager. He can go across the street, with the simplest of introductions, to a rival bank, and they will be glad to see him. It is a freedom, and not to be despised. Perhaps we have thought about these matters rather much recently, and in a way somewhat different from that of the Treasury Committee of 1918 mentioned earlier in this chapter. But the conclusion seems to be the same: neither should the banks have unlimited discretion to consolidate voluntarily; nor should they be coerced into a unified monopoly, nationalised, socialised or whatever else it may be called. They have done us very well on the whole: let them go on as they are!

There remains one last point respecting interest rates charged by banks. Even if we concede that the banks might have been in the past a little more enterprising in competing with their rates for advances, we should remember that the most cut-throat competition by banks would make hardly any impression at all on a severe depression. Not even a nationalised banking system gaily making losses could reverse a cumulative deflationary movement, though it might possibly cause a banking crisis of the disastrous sort sustained by the United States in the early 'thirties. Other action is required to deal with slumps.

Formerly the commercial banks eschewed medium-term lending; but long-term lending is certainly not a proper function for such banks.

The lack of lending in Great Britain for medium periods of time from three to ten years (or even substantially more)¹ has also been a subject of complaint. During the depressed period up to 1931 it was not entirely surprising that the commercial banks hesitated to initiate lending of this sort, although the need for it was not in doubt. It is no secret that the commercial banks had advances outstanding at that time which had, in fact, become medium-term capital to the borrowers: that is to say, loans had been made and overdrafts allowed, in the cotton industry for one example, which the borrowing companies could not repay, so that the advances were continued as a choice on the part of the banks preferable to bringing about the liquidation of their customers.

It was left, in fact, to the Bank of England to take the initiative in the provision of medium-term capital. It brought into being in 1929 the Securities Management Trust Ltd. which took over the support which the Bank had already begun to give to certain industries, and continued to support rationalisation. Again, in 1930, Bank of England initiative led to the formation of the Bankers Industrial Development Company Ltd., whose capital was subscribed by commercial banks and others including the Securities Management Trust.

Thus it cannot be said that the commercial banks were wholly neglectful of the need for medium-term capital. Such lending was not suitable for banks of deposit evidently; yet with greater enterprise they might have organised such financial houses as were set up, without waiting for Bank of England initiative and participation. We may notice that the Central Bank's participation in these enterprises was strongly criticised by the Macmillan Committee² among other authorities. We may concede that it is anomalous in principle for the Central Bank to be thus concerned in industry; in practice there need be little doubt that a valuable use was made of a small part of its great resources.

As World War II was drawing to a close, it was announced (in January 1945) that two new companies were about to be set up to provide finance for post-war reconstruction. More precisely, the purpose of the Finance Corporation for Industry Ltd. was to be the provision of "temporary or longer period finance"³ for British enterprises. In the second place the Industrial and Commercial Finance Corporation was to supply medium- and long-term capital for small- and medium-sized British firms. The former is the larger company having a capital of £25 million and borrowing powers up to £100 million, whereas the latter has a capital of £15 million and borrowing powers up to £30 million. Again the Bank of England

¹ The expression, medium-term lending, is used rather variously, sometimes meaning the raising of capital for as long as twenty years.

² Cmd. 3897, para. 403.

³ The Chancellor of the Exchequer (Sir John Anderson) as reported by Keesing's Contemporary Archives, 6964 C.

participated, subscribing about a third of the capital of the Finance Corporation for Industry, the rest of the capital coming in about equal measure from a group of insurance companies and a group of investment trusts. Its borrowed capital was to be provided by the Clearing Banks and the Scottish Banks.

The Bank's participation in the Industrial and Commercial Finance Corporation was to consist of a token subscription only, however; the bulk of the permanent and the loan capital coming from the Clearing and the Scottish Banks.

The lending facilities of these two new companies have been in demand since the war;¹ moreover many concerns have been borrowing from their commercial banks for more than merely temporary needs, so that such loans require to be replaced by finance of a more appropriate kind. But in one way or the other the short-to-medium funds necessary in the present time have been found in adequate measure. As we shall see, long-term capital is rather a different matter.

If concessions may be proper to popular criticism of the commercial banks concerning medium-term lending, the same is certainly not true in relation to long-term capital. There were those who used to point to the French commercial banks, still more to the German ones, and even to the Banque de France and the Reichsbank, complaining that these foreign banks gave to industry for long periods far more support than British banks would extend to our industrialists. It was true; and, certainly so far as the German banks were concerned, how disastrous! The German bank failures of the great depression derived from that policy. It is true that German industry was well supplied for a time with capital and made good use of its opportunities; it is also true that when the bad times came, compared with Britain, Germany suffered far worse unemployment, a circumstance material to the rise of Hitler. It is not the function of commercial banks to provide long-term capital. Only the public as investors, or the State if that sort of economy is preferred, is suitable as a source of permanent capital.

The public provides long-term capital; various methods being used to get the public in.

In the past a large volume of foreign securities has been floated in London. Such issues were undertaken by certain large, old-established and reputable firms in the City which published fair prospectuses for sound enterprises. The public could and did subscribe for such foreign securities with confidence. That does not mean that these companies never failed to fulfil the hopes of their founders; but the risks taken were reasonable ones and the compensation offered to investors was fair. The investing public was on the whole well served and well satisfied in the matter of overseas issues. Now, however, some rather long number of years must elapse before Great Britain can achieve a balance of payments sufficiently

¹ Information from The Economist Intelligence Unit, 1948.

favourable to admit of a considerable volume of overseas lending; so that this valuable function of the City of London will be in abeyance. For some years at least we are going to have all we can do to find exports sufficient to pay for the imports of food and raw materials without which we cannot live.

The same favourable view could not be taken of all issues of securities for the home market. Some were good, some indifferent and some bad. Even the commercial banks used to be given some of the blame for the poor issues put out. The name of a well-known bank, usually one of the Big Five, would occur in large letters on the prospectus which invited the public to pay subscriptions to that bank. People ignorant of the matter, supposing vaguely that if a great bank was 'in' the project then it must be a good one, paid good money for the bad shares equally with the good. In such cases, of course, the large bank was not 'in' the flotation at all in the sense of taking responsibility for it. It would be acting only as a banker; but the public did not realise that. The blame really belonged to the unscrupulous firms issuing worthless stocks and shares, and to the law which permitted this state of affairs to go on. The law has been improved, and the issues for new companies are handled now by financial houses of better reputation. But this sort of business is largely in abeyance also.

The effect of the inflation during World War II has been to make firms already existing short of capital. Simplifying the matter somewhat we may describe the change in this way: the replacement value of their real capital has gone up so much that their replacement funds and other reserves, though greater than ever, are insufficient to replace existing plant and to launch out into new developments. Without the great advance of prices the funds at their disposal would have been enough for both purposes; now they suffice only for replacement; and this at a time when the opportunities for new development are great and pressing.

Thus a large part of the new-issue business currently taking place consists of offers by well-known industrial concerns long established, first to their existing shareholders and through them by sale to the public at large, to subscribe to increases in their capital. There is no dishonesty in any such new issues.

This capital hunger on the part of established enterprises will pass if disinflation supervenes. But a great volume of sound home investment, though eminently desirable, will have to wait for some years, investment being accommodated to the needs of the export market. In order to be allowed to make a new issue of capital stock or bonds, if the amount exceeds £50,000, a firm must now obtain the permission of the Capital Issues Committee, a Treasury body having permanent statutory powers since the Borrowing (Control and Guarantees) Act of 1946. It is believed that the C.I.C. has refused a number of applications for such permission, and in view of the shortage of savings and the investment opportunities that would not be surprising; but it has not been suggested that the C.I.C. has acted either improperly or unwisely.

It is perhaps of a little value briefly to mention four ways in which the public is induced to invest its money in enterprises.

The first of these is private issue: it includes the cases wherein a firm is started with a man's own means, with money subscribed by a friend or by a syndicate of business men. This is the type of financing practised by small undertakings, for example, by unit retail shops. Properly speaking, this method does not get *the public* in, but only a few acquaintances. Private issues used to account for a considerable proportion of all capital issues.

Another method is public issue, a process in which several firms participate. In the first place a promoter, who is often a single person, but sometimes a syndicate, decides to 'float' a company; it may not be an entirely new enterprise in the sense that it is floated to acquire one or more existing businesses, often private ones. The promoter plans the enterprise, fixes the amount of the capital, and usually applies to the authorities for the registration of the prospective enterprise. Then he arranges that some firm, preferably a well-known one, shall issue the prospectus. The promoter may be remunerated by a cash payment; by a block of shares in the business, usually ordinary shares; by a seat on the board; or by some combination of these. If he retains an interest in the firm, he has some reason for trying to make it a success; but, in general, he is interested in seeing that the capital is as large as possible, since his remuneration bears some sort of relation to the amount of capital. The issuers, on the other hand, probably underwrite the issue, that is, agree to buy any shares the public does not subscribe for. Their interest, therefore, is to make the issue as attractive as possible, so that the public will buy the whole thing, and they will not be left to buy any; for, on those shares they purchase, they may make a loss, since the shares if the public does not like them will fall to a discount on the Stock Exchange, and the issuers will have either to lock up their funds or else to sell shares at a loss. Thus the issuers ought to see that the public will get a reasonable and proper bargain for its money; unhappily, unreliable issuers may be content to make an issue, really a very poor investment, *appear* to be good. The issuing firm may be a substantial stock-broking house, or an old-established merchant banker, or it may be a worthless company, set up solely for the purpose of making the issue.

It falls to the issuing house to ascertain whether the shares about to be issued will comply with the regulations of the Stock Exchange; if not, the terms of the intended issue will have to be changed, because the Stock Exchange deals only in those shares which comply with its regulations. The issuing house is almost certain to arrange sub-underwriting contracts; that is, that other firms shall subscribe for some of the shares which the public does not take. As we have mentioned, an arrangement is made with a bank that it shall accept subscriptions to shares from the public. Then the issue is made.

A third manner of attracting capital is by offers of sale. The chief difference between this method and the second one is that the issuers

(usually an issuing house or a firm of brokers) buy all the shares of the new company and resell to the public by means of a prospectus. The legal requirements are now practically the same in these last two cases. The general feeling used to be that the commissions drawn by those making offers of sale, and, equally, those accruing to underwriters and sub-underwriters, and likewise the rewards of promoters, were all excessively high.

The last method is known as Stock Exchange introduction. It consists of nothing more than obtaining permission for the shares to be dealt in upon the Stock Exchange. This method is also called placing. A syndicate (or pool) is formed which either owns all the shares to start with, or buys them from the issuers. When leave to deal is obtained, the syndicate begins to unload the shares on the Stock Exchange, usually acting through a single firm of brokers who may be the issuers. The syndicate does not unload quickly because that will send down the price of the shares, and therewith the pool's profits; on the contrary, they act cautiously, waiting for the public to come in and buy, watching the Stock Exchange price and slowly unloading the shares so as to maximise their profits; or, if the new firm is not a success, to minimise their losses.

For nationalised industry the borrower is, of course, the State, which would borrow in the form of bonds at a fixed rate of interest. In such cases people would not need to fear that they might not receive the interest offered. That risk could be disregarded altogether. But the value of the bonds and the interest would be another matter. Inflationary increases in the price-level rob bonds, both principal and interest, of their real value. The protection which the saver possesses against inflationary losses of purchasing power of this sort consists of the option which is open to him to buy good ordinary shares. If inflation occurs, the dividends paid on these may be expected confidently to go up. Many prudent investors, including some institutions, hedge by holding a part of their assets in ordinary shares and the rest in bonds. If deflation occurs the bonds will be good; if inflation, the ordinary shares. In a *wholly* nationalised economy wherein *all* the means of production belonged to the State (a condition not sought, perhaps, by anyone in Great Britain who has thought what it would mean), there would apparently be no ordinary shares; and the investor's normal means of self-protection would no longer be available; but, perhaps, the possession of wealth would be, anyhow, of small importance in those conditions.

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CHAPTER XVII

THE NATIONAL CONTROL OF MONEY

Governments are in ultimate control of national economies.

IN this chapter we want to review and to consider in more detail the methods whereby the economic activity of a single country can best be regulated; and to go on from there to touch in Chapter XVIII upon the problems arising from the fact that one country's behaviour reflects upon the economic systems of others, a matter which will recur in Chapter XIX where the status of monetary policy is touched upon.

Government confined to the borders of religion, to politics, to relations between the heads of States, and to personal proprieties is over, for the moment anyhow. If our experience of total government proves too unpleasant, perhaps we shall return to the earlier, more limited concept, even shouting a mocking slogan that good government is no substitute for less government; but on the whole it seems probable that total government will have to prove extremely unpleasant or remarkably inefficient, or both, before men will unite in sufficient numbers to reverse a trend which few of any political party anywhere resist to-day. In the meanwhile total government has invaded the economic jungle, among other places, and is endeavouring assiduously, largely by ministerial decree in Great Britain, to induce the wild animals to perform diverting tricks.

It is no new thing for government to be concerned intimately with economic activities; but when this occurred in the past there was no disputing the obvious necessity for the majority of producers to continue raising agricultural output. Industrial revolutions have changed that. But industrial revolutions in Great Britain and some other countries were marked by an almost complete abdication by the State of its right to prescribe what should be produced. Indeed, the State went a long way towards abdicating also its powers over methods of production; and protest, agitation and the devotion of reformers were required to bring about by legislation working conditions tolerable to nations rendered sensitive by prosperity. It cannot be gainsaid that output as such got along very well without the State: indeed, in Great Britain it had never got along nearly so well before; nor has it since. Moreover, it is as well not to lose sight of the fact that upon output depends the standard of living: output is the cake, however much the conditions of its baking ought to be regulated and however it may be divided.

But we are coming near to what appear in the eyes of many to be horrible old Liberal ideas, licentious *laissez-faire*, denounced with such virulence by

Lenin, Hitler and others. For good or ill, government has assumed the role of deciding, to repeat the phrase used of Soviet planning, what, when, where and how production shall take place. And there is no prospect in the immediate future of government abdicating this part again. Indeed, as an amateur performer government may find itself constrained to hand more and more of its leading part to professionals, standing itself in the auditorium to lead the applause; but a discussion of this matter would take us too far from our purpose.

It may be that Governments, conscious of powers not limited even by a rigid constitution in the case of Great Britain, will seek to control the national economies in their own ways, without bothering about the powers of control over money possessed by Central Banks. On the other hand, the use of monetary powers may become part of 'the plan.' In either case, whilst observing that Governments are ultimately in control, that government includes economic activity to-day, we should observe what powers of control Central Banks possess and how these radiate through the monetary system to affect the lives of producers in particular and also of consumers, who are the whole community, of savers and of investors.

But with two main tasks to fulfil, Central Banks have had important monetary powers: Bank Rate, open market operations, moral suasion, Exchange Equalisation Accounts.

We saw in Chapters VI and XIV that the Bank of England used to have charge of the country's monetary gold stock. The same used to be true of other Central Banks, and in some cases it is so still; for one the Bank of France, as we saw in Chapter XV, still keeps the national monetary gold reserve. Even now we can reasonably regard Central Banks as the normal custodians of gold reserves, and expect that they will discharge this function in the future as they have done in the past.

The powers of Central Banks are connected intimately with gold reserves. And this leads us to a point of importance: in part the controlling devices exercised by a Central Bank affect the monetary position of its own country in relation to others; in part the control affects internal conditions. The two are almost inextricably mixed up together, and steps taken to influence the international situation will recoil upon the home country. But it is better to think of the Central Bank as having two tasks before it; for the steps taken to suit one may not suit the other, and contrariwise. Put in the briefest way, the external job of a Central Bank is to regulate the value of its currency unit on the foreign exchanges; and the internal job is to secure full employment and maximum output. Those may be called the main ideas, for, indeed, the realities are much more complicated than that. Now what we should observe to start with is this: the powers of monetary control possessed by Central Banks were evolved to discharge the international task, not the internal one; and very suitable they were for the former, and on the whole highly inadequate in modern conditions for the latter. Indeed, until after World War I the main task of

a Central Bank was certainly thought to be the regulation of the value of its currency unit in relation to others; which meant, in the days of the Gold Circulation Standard, ensuring that the gold in circulation and in the reserve of the Central Bank was not shipped abroad in quantities sufficient to cause a sudden serious fall of prices. People were not unmindful that Central Bank policy affected the supply of credit and that the supply of credit influenced business conditions; but any idea that the Central Bank must take responsibility for, and adjust its policy to suit, the profits of business was not in the thoughts of those days; if the Central Bank assured a stable gold currency, regulating credit as much as it needed in order to do that, then it was deemed to have done its job.

The idea of Central Bank responsibility for the general economic conditions of a country was one which arose, certainly as a burning issue, in the period between the World Wars. In that period, too, perhaps the idea passed away. It may be, when we can look back on that time with the perspective of history, we shall find that that idea was more than any other typical of a short and not very happy phase in our social evolution.

Having in mind, then, the two tasks confronting a Central Bank, and an indication of the historical contexts in which they arose, we may ask what instruments are available and will be available for their discharge. It will be simpler if we take that question in stages and discuss first what instruments of control the Bank of England has wielded in the past. These have been four: Bank Rate; open market operations; moral suasion; and the Exchange Equalisation Account.

Let us draw together the threads of the arguments touching upon Bank Rate and upon the Gold Standard from Chapter X, open market operations from Chapter XVI, and upon the quantity of money from Chapter IX.

If the Bank of England found itself required to provide gold to ship abroad in the days of the Gold Circulation Standard or the Gold Bullion Standard, its normal reaction would be to put up Bank Rate, and after World War I to sell Government securities as well in order to make its discount rate reflect upon interest rates in general. Then short-term funds came to London and brought to an end the demand for gold. Thus the external task was performed, readily and with certainty before World War I, and somewhat uneasily and uncertainly afterwards.

But even before the external task was discharged, the commercial banks, finding their deposits at the Bank of England depleted, would call loans from the Money Market, which would lead to higher rates of discount. But that disturbed the previous harmony among long-term and short-term interest rates. If the schedule of liquidity-preference remained stable, people would be impelled to sell longer-dated securities and to buy shorter-dated ones. But the desire to sell longer-dated securities could be satisfied only by lowering their selling prices, and such a lowering of their current capital values was, of course, the same thing as an increase in the longer interest rates. The effect was commonly reinforced by a change in the schedule of liquidity-preference: seeing a rise in interest rates, investors

feared a further increase and removed their funds from longer securities, whose capital value could fall far, to shorter securities whose capital value was kept high by the fact that the repayment of the full nominal amount would soon be made by the borrower.

The further effects of an increase in the whole schedule of interest rates derived from the altered relationship between this schedule and the schedule of the marginal efficiency of capital. Prospective profits would shrink, and therewith the demand for credit: spending, production, employment and prices would all proceed to lower levels than would have obtained if interest rates had not been raised by authoritarian action. If the schedule of the marginal efficiency of capital was greatly above the schedule of interest rates, the increase in the latter might still fail to bring the two schedules into an equilibrium relationship; in that case, a boom would continue or develop. On the other hand, if the schedule of prospective profits was already low compared with current interest rates, the increase in the latter would cause still further deflation in circumstances of depression. It is evident that this describes many of the turns of events between the Wars. Or if there were a boom and prospective profits were overtaken by rising interest rates, then crisis would supervene.

Thus action taken to defend the gold stock would have far-reaching effects upon internal conditions also; and effects which might not be required nor intended at all.

On the other hand the same restrictive action by the Bank of England might be taken for internal reasons, with the object of checking a boom likely to become genuinely inflationary. In that case the gold stock might be simultaneously in some danger of exportation, in which case the danger would pass as result of the Bank's action. Or, because similar prosperity was to be found abroad, the gold stock might not be threatened. In that case, England's restrictive increase of interest rates would cause other countries to lose gold, and therefore to take similar defensive measures. Thus was deflation spread from one country to others.

In fact, there was a good deal of anticipation in the working of the system: the Bank of England would anticipate the gold movements and take such action that they never actually occurred. Similarly, if Bank Rate were well above market rates, the Money Market and the commercial banks would anticipate a tightening of conditions: the banks would call, and market rates would move up towards Bank Rate; so that it might not be necessary actually to raise Bank Rate after all. Again, if Bank Rate were moved up, rates in the Money Market would harden at once since it was known perfectly well that the Bank could insist on higher rates, by open market sales forcing the Market in the Bank; thus the Bank often did not need to sell securities: its power to do so if necessary was enough.

Between the Wars, the Bank of England, faced with external conditions requiring restrictive action and internal conditions clamouring for expansion, at times tried open market sales unaccompanied by a change upwards of Bank Rate. While effective enough externally, this practice did nothing

to ease internal conditions. The same instrument was employed also in rather different conditions which would have been thought in earlier days to warrant a general expansion of credit: foreign funds would come in and seek short-term employment. Instead of expanding credit, the Bank would offset them by open market sales, knowing that at the first sign of trouble this 'hot money' would be seeking another home. To what extent such action attracted other short-term funds and led to deflation abroad it is impossible to say.

So far we have been speaking of two instruments employed by the Bank of England to restrict credit and to defend the gold stock. We may notice that other Central Banks used the same instruments with the same effects: only the Money Market technique was different. But how did the same instruments operate to keep foreign gold away and to expand economic activity? As to stemming an inflow of gold there was no difficulty: a lower Bank Rate, reinforced if necessary by open market purchases, could be used effectively. But the same process was lamentably ineffective in stimulating industrial recovery: in depression it is not the funds but people willing to borrow them that are lacking. We have seen in Chapter IX, and in Chapter XVI recurred to the fact, that no possible lowering of interest rates will bring about recovery from severe depression. That is why Central Banks cannot discharge responsibility for the general economic health of countries and why the control of national economies has passed into the hands of Governments. The immense powers surrendered to and wielded by President Roosevelt in his first term of office constitute the outstanding example.

Then why did it ever happen that Central Banks had powers adequate to check booms but no sufficient means to bring about recovery? Why this extraordinary asymmetry? The reason can be stated simply. Central Banks, led by the Bank of England, developed the Bank Rate technique in an era when economic systems were biased towards expansion. All that was necessary was to stop inflation getting out of hand. This invariably involved a crisis, for expansive forces were to be denied only by decisive action, and a consequent depression; but in those times depressions were short-lived and no action was urgently necessary to hasten their end; slumps were not a burning issue. Bankruptcies were common-enough, and so was unemployment; but the bankrupts started in business again, paying off their creditors, and the unemployed were reabsorbed. And, in general, people trusted in divine goodness rather than in human wisdom. Perhaps we may ask in passing whether we are properly entitled to look back with superior disdain upon their misplaced faith.

Connected with the anticipations which served in place of the use of controlling instruments was the power of moral suasion wielded by Central Banks. The Bank of England used its persuasive powers particularly to govern the rate and destination of investment. The Bank could, of course, ruin any firm performing new-issue business. If one of the highly respected private banks, specialising in issues for overseas, determined to

issue a large loan in face of the opposition of the Bank, the Bank could retaliate by raising interest rates vigorously. If the Bank's counter-measure were sufficiently swift in effect, the private bank would probably be left with the bulk of the issue on its hands; if the Bank's action took longer to make itself felt, the subscribers to the new loan would find that their bonds had fallen heavily almost as soon as purchased. A very few loans issued with either of these results would bring disaster to the private banker.

Indeed, the Bank needed only to whisper about the Money Market that interest rates were likely to rise, and the news would travel rapidly, via the Stock Exchange to the public; interest rates would actually begin to rise and so spoil the prospects of the new issue. It is well to remember that the Bank possessed this power, for it did not appear in practice. On the contrary, very intimate and agreeable relations existed between the Bank of England on the one hand and, on the other hand, the private banks, discount houses and other long-established elements in the Money Market. It was from these firms that the governors of the Bank were drawn. When overseas issues were mooted, it was customary for the prospective issuer to obtain the blessing of the Bank or to decline to undertake the issue. No doubt there were times when the Bank gave, so to speak, an all-clear signal, thereby permitting overseas issues to be made without specific reference to itself. But such conditions were not characteristic of the inter-war years. After 1931 it was the Treasury rather than the Bank which desired to throttle down the rate of investment. But in that time, driven by the chill winds of depression, the monetary authorities and institutions drew close together. The Treasury issued general directions and the Bank of England worked closely not only with the Money Market in the narrow sense but also with the commercial banks in implementing those directions by its controlling devices.

The Bank's regulation of internal issues was not always so complete. That would be a matter simple to remedy by legislation of a sort not generally oppressive, nor limiting unduly the reasonable rights of private persons. It is uncertain, however, whether such legislation will ever prove necessary now.

The purpose of the control of new issues was primarily to influence the foreign exchanges. A foreign issue floated in Great Britain would be converted, of course, to a greater or less extent into the currency of the borrowing country and other foreign currencies: that part of such foreign lending would be what we might describe to-day as an unrequited import of foreign securities, tending to depress sterling and perhaps leading of itself to an outflow of gold. Yet the whole of a foreign issue would rarely be unrequited by British exports. Although by no means all loans contained tied clauses requiring the loan or a part of it to be spent by the foreign borrowers in Great Britain or Northern Ireland, it was common for some portion of such loans, in fact, to take the form of British goods: the lending was a vehicle for export business, particularly for engineering

and kindred lines of production. Thus a control of foreign loans was a weak and unsatisfactory policy for the Bank of England to pursue: it reflected upon economic activity at home by diminishing export demand; and it deprived the country of securities which might have been paying us interest in later years, thereby strengthening sterling on the exchanges, as well as contributing to our ability to make demands abroad by realising the principal in such emergencies as war. That is not to say, however, that such use of moral suasion by the Bank was not necessary.

Internal issues, on the other hand, had a direct effect upon home activity and an indirect effect upon the foreign exchanges. To limit the flotation of new permanent capital is clearly to prevent real investment; and if this is done in circumstances of depression it must ensure that the national income is lower than is necessary for that optimum equilibrium of which we spoke in Chapter IX. At the same time to permit all the internal issues which financiers want to float may cause the price-level to rise at home, leading to diminished exports, higher imports and a drain of gold.

Moral suasion was not a reversible instrument. We return to the same problem discussed above. The Bank could not talk the Money Market into a state of prosperity: to breathe the favourable word that all issues would be looked upon kindly could not kindle enterprise in circumstances of depression. Again Central Bank power of control had the nature of a valve: it could be closed so as to diminish the flow of economic activity; it could be closed against great pressure; but if the pressure had been lost when the valve was reopened, no flow would result.

We should remember, too, that later the Bank of England possessed the Exchange Equalisation Account wherewith directly to operate in the foreign exchange market. It is not literally true that the Bank possessed our Account: the Account was the property of the Treasury. Yet it is not seriously misleading to speak of the Bank as the possessor. It was, in fact, the Bank which ran the Account. And that was symptomatic of the integration of our monetary system which developed after 1932 when the Account was set up. Other Central Banks were also associated intimately with the operation of the Exchange Funds of their respective countries; but not all countries, of course, had such Funds.

Exchange Equalisation Accounts were very potent instruments, as we have seen in Chapter X, for the control of foreign exchange rates; particularly was that the case after the Tripartite Monetary Agreement of 1936. We should remember, however, that although six countries did much to hold the exchanges for the whole world, the Gold Reserve Standard was not operated by a majority of countries.

If then we may regard an Exchange Fund as an effective weapon, in times not wholly desperate, for dealing with the external problem facing a Central Bank, what may be said about the internal repercussions? The simple answer is that they were wholly good. By relatively stable exchange rates international trade was aided to the greatest extent possible; that

is to say that export industries benefited. But that evidently means also that international competition was stimulated; and that is no bad thing. It is economy properly so called: it is the development of the geographical division of labour that industries in different countries shall compete on something like equal terms; and the terms were something like equal: no country would have been able in that arrangement for long to enjoy an exchange advantage in international competition; moreover, a country having productive efficiency increasing relatively to the efficiencies of others would enjoy a favourable change in the terms of foreign trade as its currency was allowed gently to rise. Perhaps it is one of our less clearly perceived tragedies that this system did not go on longer.

The alteration of Member Banks' cash reserve ratios and taxes on money can also be used to control national economic systems.

In Chapter XV, glancing at the Federal Reserve System of the United States, we noticed the power of the Board of Governors to alter the ratio of reserve deposits which Member Banks must keep at the Federal Reserve Banks. And it is obvious that the same method of control could be used by other Central Banks, either in the form in which it exists in America or modified to relate to Member Banks' currency on hand plus their deposits at Central Banks.

The Macmillan Committee, to which we have already alluded several times, considered such an instrument for use in Great Britain. The conclusion of the Committee was that the Bank of England could pursue such a practice with advantage, but that statutory embodiment of it was unnecessary.¹ And it may be conceded that in a monetary system such as our own wherein so much depends upon custom and agreement, a conventional method would have an advantage of flexibility which would be to some extent lacking in a legislative enactment defining the limits of obligatory reserve ratios. We have just seen in the United States, for example, how slow and inadequate a legal change in the reserve limits can be. Furthermore, to have the commercial banks quietly increasing or decreasing their cash reserves at the bidding of the Bank of England would admit of a certain lack of fuss, and even permit a certain amount of secrecy *ad interim* which might be desirable at times. On the other hand if publicity were wanted, the Bank of England would only have to call upon the Press, giving the reasons for the change which it had requested the commercial banks to make, and that would be a valuable item of news. Again, discretionary power for the Bank over reserves would allow, as the Macmillan Committee evidently had in mind though did not say very clearly,² a certain amount of differentiation between groups of commercial banks; which again could probably be agreed upon without difficulty by all concerned.

The Macmillan Committee argued that the changing of reserve ratios

¹ Committee on Finance and Industry. *Report*, Cmd.. 3897, 1931, para. 370.

² *ibid.*

was an instrument superior to open market operations since the former would affect similarly and without delay all the types of assets which commercial banks hold, whereas the latter falls with disproportionate incidence upon short-term securities, thereby involving delay and uncertainty in the effect to be produced in long-term rates of interest.

The whole idea of compulsory member bank reserves may excite derision as being the maintenance of another inedible iron ration; not only are Central Banks to starve amid plenty but, it might be argued, commercial banks as well. The answers to such an argument are slightly different according to whether Central Banks or their members are in question. In the former case, which does not really concern our main discussion here, the inedible iron ration, be it gold or gold certificates, can be brought into use by legislative change; though it is true that that may not always be useful. In the case of member banks the inedible iron ration of reserves can very simply be made available by Central Bank permission.

Thus this objection may be dismissed; and the conclusion may be reached that, whereas power over reserve ratios may not be so essential for other Central Banks as it is for the Board of Governors of the Federal Reserve System at the moment, for special reasons adumbrated in Chapter XV, none the less this power is a useful and proper one for any Central Bank to possess; and that it has at least one important advantage over open market operations.

How then does the power to alter member bank reserves appear as a reversible device? Would such a power enable a Central Bank to reflate a sagging economy? Simply, the answer to the latter question is no; and to the former, that it would be no better than Bank Rate, open market operations or moral suasion. A large volume of compulsory reserves could be made very rapidly into excess reserves; but if borrowers were lacking, the problem of reflation would remain. Like all the other Central Bank powers which we have considered, direct power over bank reserves would be effective for the external problem, and for the internal problem if that were inflation. But for depression it would be a valve where a pump was required.

Having noted the limited usefulness of control over reserve ratios, we should look briefly at something remarkable as a monetary power which will be seen at once to have the nature of a pump. This is the power to tax money. And since the right of taxation belongs to the State, it will simplify our brief discussion if we imagine the State, and not the Central Bank, as operating this unusual instrument of control—though in truth some of the effects of Central Bank action upon the people are not substantially different from taxation.

The purpose of taxing money is to apply an artificial stimulant to the velocity of circulation in conditions of depression: it is a device invented expressly to counteract economic stagnation. The principle is that with the authority of the State the holder of money shall become liable for a small

tax fairly frequently, so that as often he shall have a motive for parting with his money so as to avoid the tax. A tax of 1 per cent per month, which is not, indeed, a very light tax, is likely to be sufficient for the purpose.

In 1934, in conditions of extreme depression, the small Austrian township of Wörgl issued its own notes, compelling the inhabitant in whose possession any note was at the end of the month to affix to it a stamp worth 1 per cent of its value; without the proper stamp a note no longer carried the authority of the town, and became worthless. During the short time which the experiment lasted, it was startlingly successful: unemployment disappeared; arrears of municipal taxes were paid; in short, prosperity returned as if by magic. The tax on money did not last long since the issue of notes by the township was found to infringe the monopoly of the Austrian Central Bank. But at least the experiment was sufficiently serious and sufficiently successful to attract much notice. It did not matter that ordinary Austrian currency was available in the town, for the municipal authorities paid for their own needs again and again with the same notes of their own issue as these returned to them in payment of taxes.

There is no reason why the same principle should not be applied by a State. It would not matter that coins could not be stamped; and in countries where bank deposits predominate as the means of payment, banks could be charged with the duty of deducting the appropriate tax from their customers' accounts at the intervals decided upon. There is only the startling novelty of the scheme to militate against its adoption: other methods are attempted of playing upon liquidity-preference; a direct discrimination against the extreme form of liquidity is perfectly sound in principle. Another way of regarding a tax on money is as a negative rate of interest—and at 1 per cent per month a somewhat high one. The schedule of the marginal efficiency of capital would have had to collapse very completely indeed to remain uninfluenced by such a factor. Lack of experience of the tax on money used on a national scale leaves the question of its effect on the foreign exchanges, and some other questions, unanswered. None the less, if it is ever impossible or clearly unwise to employ the methods of control which we are about to describe, the tax on money should be taken out of its pigeon-hole among the archives, dusted, and looked at again.

But there predominate to-day budgetary methods of economic control, from which no evil will result if they are used sensibly.

On 30 June 1932 Bank Rate was moved down to 2 per cent, and, except for a short-lived flutter upwards just before World War II, there it has stayed ever since.¹ The question arises therefore: as a method of monetary control, is Bank Rate dead or merely in abeyance? Whilst the answer cannot be discerned yet with certainty, we shall try to adduce reasons for believing that it will never play more than a subsidiary role in the monetary

¹ Bank Rate was moved up to 4 per cent on 24 August 1939; lowered to 3 per cent on 28 September; and put down to 2 per cent again on 26 October 1939.

control of the future. It is the Government which is cast in the part of the *prima donna*, and the aria which it sings is the budget song of surpluses and deficits.

In the great depression we came to understand much more clearly than before that the problem of slumps consists of a deficiency of purchasing power, a very simple and obvious proposition. And since the publication of Keynes's *General Theory of Employment, Interest and Money* in 1936, the whole matter has become much plainer and more widely understood. The argument may be stated more fully but still very simply in this way: to maintain employment and output, expenditure must be kept up; to ensure sufficient expenditure, income must be maintained; if income falls, how can it be restored? By a deficit in the budget, for that is a net addition to the national monetary income. For this purpose it matters little how this deficit is financed: it can be covered by the printing of currency notes; or it can be covered by borrowing from the Central Bank or from anywhere else so long as the Government's borrowing does not deprive others of loans of equal amount which they would have spent. Moreover, it does not matter on which side, so to speak, the national budget is under-balanced: the effect on the national income would be the same if expenditure were increased to the requisite extent by public works; or if the revenue were decreased by a similar amount by lowering taxation. Or evidently the same result could be achieved by compromise, the budget deficit deriving partly from increased expenditure and partly from decreasing revenue.

Furthermore, this instrument of control is reversible in the sense that a runaway boom could be checked by a budget surplus. It might not be easy for this purpose to cut down expenditure unless a large volume of public works was in progress; thus the over-balancing of the budget might have to come largely or entirely from the revenue side in the form of higher taxation. The surplus would be disposed of by repaying a small portion of the National Debt or in countries where money consists largely of currency by collecting and destroying currency notes.

We have noticed already in Chapter XII that the British Government has been trying since World War II so to over-balance the budget as to hold in check our inflationary progress. We observed there too the condition of excessive taxation which has rendered abortive their efforts. The outstanding case of reflationary Government deficits, on the other hand, is of course that of the United States in the era of the New Deal. The same course was followed in Germany in the early years of the Nazi Government, though with rather different purposes in mind. The American deficits were designed to bring about economic recovery; those in Germany were part of the policy of national power which required rearmament on a vast scale; but since the rearmament entailed deficits the same reflationary result was produced.

Are there any serious difficulties in the exercise of fiscal control over the economic system? In the eyes of its critics there are plenty. To some there

seems to be something wrong, yes, morally wrong, about under-balancing the budget. They feel that an honest trader must prevent his expenditure from exceeding his income, otherwise he will eventually go bankrupt and inflict wrongful losses on his creditors; and that a prudent business man will cause his expenditures to be less than his income so that he can save the balance. And thus, according to such conservative thinkers, the Government ought to act like an honest and prudent person, always balancing its accounts and whenever possible over-balancing them. Taxation exists, they say, in order that the Government may pay its way, not so that it may play the philanthropist in times of depression.

This argument is evidently one against under-balancing the budget, not against over-balancing it. And the argument is entirely erroneous. The analogy between a person or a firm and the State is false. The State will not go bankrupt, nor will it inflict wrongful losses on its creditors. Nor is there any good reason why it should balance the budget year by year. If good reasons existed both against borrowing and against repaying the National Debt in a particular year, then and then only would there be a good reason for balancing the budget.

The orthodox opposition to budgetary control of the economic system overlooks that all manner of businesses do in fact under-balance their budgets enormously in certain years: they do so when they borrow either on permanent or on working capital account. But businesses arrange their accounts so as to keep capital debts separate from the year's trading results; thus they do not show their borrowings as a deficit. Nor would the Government if the national accounts were arranged as a capital budget and a current budget. Yet the orthodox will object that enterprises undertake capital expenditure for productive purposes, whereas a Government deficit disguised in a capital budget account would not be productive. Such an objection can be answered by a question: Would it be more productive on the part of the Government to leave a million or more men and sundry productive capital goods in involuntary idleness? For that is the choice which the Government has to make. Government expenditure unbalanced by revenue, whether it be called a deficit or expenditure on capital account, by stimulating consumption leads to production which would not otherwise take place. Whether that is properly to be called productive expenditure in the conventional sense or not is immaterial. Such expenditure is necessary. It is necessary because the Government alone in the economic system possesses the power to act on a scale great enough to turn the tide of depression. The Government alone can command financial resources sufficient for the purpose: millions of pounds or tens of millions, or even hundreds of millions can come from the State to swell the national income; they can come from nowhere else.

There is another argument with which to confront orthodox (or old-fashioned) objections to budgetary economic control. No one opposes Government borrowing on an enormous scale in war, because by common consent it is necessary. But the hidebound may still be heard to argue

that war is different; war is a national emergency. So, of course, is a depression; not, perhaps, an emergency of equal gravity, but certainly a national emergency if the words are to be used properly at all. Moreover, the borrowing necessary to cure a slump, however severe, would not be upon the scale which was needed in World War II.

There is more in the argument of national emergency than appears at first sight. In war not only is borrowing as such necessary because the Government cannot find in any other way the means to pay for its requirements; inflation as such is an essential. Inflation must be used in the manner of taxation to take away purchasing power from the people by way of a rising price-level. In a depression, as the price-level falls, fixed income receivers benefit. And in a sense they benefit at the expense of other groups in the community, including wage-earners. There is no justification for this: if Government deficit spending prevents the price-level from falling and thus the fixed income receivers from gaining their prospective windfall advantages in real income, that is perfectly salutary and proper. We should bear in mind, however, that fixed income receivers have suffered abominably in World War II, and it would be very difficult for anyone dispassionately to say that this was right.

A final argument against deficit spending remains to be discussed briefly. What if the deficit recurs year after year; what if no balance is made between revenue and expenditure in the ten years which we might regard as the normal span of the trade cycle; what if the National Debt grows and grows and grows with only such small surpluses as offset to a negligible extent the deficits of depression years? Supposing all those things to happen, we should have a currency unit whose value was falling appreciably as a permanent long-term trend. It must be admitted that this could be a serious matter: we could so stimulate our economy that, instead of sagging into deflationary depression, it was for ever staggering into inflationary booms, like the French economy after the two World Wars. Apart from considerations of monetary resources attempting, perhaps with their owners, to flee the country, some very worthy persons and institutions would be devoured in effect by the variable income receivers. At the worst our country would be badly mismanaged, and the formation of real capital would be affected adversely, which would be a very serious matter in the long run. But would it, indeed, be any worse than having severe and recurrent depressions? The general presumption seems to be that it would not be any worse.

Nothing worse would result than a perpetual fall in the value of the pound sterling. To talk of the State going bankrupt is nonsense. It is true that the National Debt might become so great that the revenue necessary to pay the interest on it (and to pay the other expenses of the State) could not be raised by taxation. But so long as the State possesses, as it always will do, the right to issue money, then it will never go bankrupt because it cannot pay its own citizens. There is a sense, it is true, in which a whole nation can go bankrupt. A country may become unable by any

means, or by any tolerable means, to pay foreign creditor countries. Germany was forced into that position by the weight of reparations after World War I; and many countries at present are not far off such a relationship with the United States. But this is a case of quite a different sort. Where a national debt owed to its own citizens is in question, a State cannot go bankrupt. The effect of a perpetually rising national debt would be a fall in the value of the currency unit, and any other unpleasant effects would result from that.

Now we have been taking the gloomiest view. Perhaps in the present century, indeed, the people at large are not to be expected to understand the budget as a factor controlling the economic system; though the matter is by no means abstruse. But at least political leaders might be expected to acquire this small grain of wisdom. Budget surpluses are a prudent necessity in the good years roughly to offset the deficits of the bad ones; and we may well thank the conservative, orthodox and hidebound before we have finished for their insistence on 'sound' finance; but the Government's finance does not need to be 'sound' year by year; most certainly it should not be so; it does need to be 'sound' within a space of about ten years.

Where then do the instruments of Central Bank control stand to-day? What of Bank Rate, open market operations, moral suasion and Exchange Fund?

Bank Rate was like the wheel of a ship ever being turned by a skilful hand, sometimes one way and sometimes the other so as to keep the ship upon its course. But now we seem to think that Bank Rate is the steering-wheel of a motor-car on a straight road: we imagine apparently that we can centre the wheel at 2 per cent, start the engine, press the accelerator, let in the clutch, take our hands off the wheel and continue for evermore in the right direction, hoping that a high wind will blow from the Treasury first from one side and then from the other so as to keep us out of the inflationary ditch on the left and the deflationary ditch on the right. It may be sound enough.

But there is no reason why Bank Rate and open market operations should not be used as auxiliaries to budgetary policy. The latter will normally be slow in effect since there is normally a budget only once in a year; and it is probably not desirable to develop a technique of monthly tax rate announcements, taxes going up as prosperity increases and down as recession appears. People want to know where they are for a year at a time as to their taxes. On the contrary Bank Rate can be altered week by week if need be,¹ and open market operations can be undertaken whenever required. Furthermore, it is likely to be difficult in conditions of prosperity to gauge what size of surplus will be necessary to stop a boom getting out of hand. Bank Rate and open market operations stand ready to be used, particularly on the side of further restraint. Yet it would be fallacious to argue that budget deficits can be used to cure slumps and Central Bank

¹ As in the past there will very rarely be occasion to alter Bank Rate more frequently.

methods to control booms: such methods would lead to an ever-growing National Debt, which it is wise to avoid. None the less when a budget surplus was difficult, or anyhow politically difficult, to achieve in 1948, Bank Rate might have been used to reduce the amount of inflation. Such circumstances may recur.

Some people seem to have gleaned the idea from the teaching of Keynes that there is something morally disreputable about Bank Rate; that an advance from 2 per cent must be a return to widespread unemployment, or some hazy notion of that sort. Such ideas are without foundation. They find no support in the writings of Keynes. If there exist inflation and overfull employment, these should be counteracted, particularly when there are shortages of necessities as there usually will be in such conditions. The desired effect can be achieved by budget surpluses, and it should be; but the process is bound, at least at first, to be one of hit or miss. The budget surplus is a very crude instrument, even if it is a direct one; the indirect methods of Bank Rate and open market operations are by far more delicate and their virtue should not be neglected. A hand should be put on the steering-wheel if the high wind from the left blows too little or too much. In Great Britain it will be for the Treasury and the Bank of England to work out the ways, as they are no doubt doing, in which budgetary means of control can best be combined with the traditional methods.

The scope of interest rate technique will remain limited in the face of economic recession. If we regard 2 per cent as the minimum Bank Rate, and if it is standing above that figure when recession appears, then it should be lowered, open market operations being used if necessary to make market conditions 'easy.' But that as we know is not enough. If the recession is serious, it will become more serious if left alone; it will develop into a cumulative deflation. Budgetary help must be given in those circumstances. But it would obviously be absurd to incur a deficit while maintaining Bank Rate at 4 per cent: contrary policies pursued by the Bank and the Treasury would be ridiculous.

We should notice before leaving this subject that the control of interest rates does not always necessitate changes in Bank Rate. In the days of Dr. Dalton's cheap money policy which went on throughout 1946 and most of 1947 with varying measures of success, there were considerable alterations in short, medium and long interest rates. What happened was that the Treasury used the large funds belonging to Government Departments, such as the Unemployment Insurance Fund, to buy various sorts of securities, while the Chancellor tried to assure the Money Market that low interest rates were appropriate and would continue. The first part of this policy consisted then of open market operations carried out by the Treasury instead of the Bank. And the latter part might possibly be called moral suasion, of a somewhat unusual and not very successful sort.

What is to be said of the moral suasion, particularly suasion concerning new issues, which the Bank used to practice? Hardly anything. Since 1946 there has existed a statutory ban against all new issues exceeding

£50,000 except those having the specific permission of the Capital Issues Committee.¹ This we must expect to continue at least for some years. We observed that moral suasion was not a reversible device. Budgetary control on the other hand can stimulate investment by restoring profits.

And what should be noted regarding our Exchange Equalisation Account? Again, hardly anything. It still exists. It holds such monetary gold reserve as remains, together with our reserves of United States and Canadian dollars. But the Account does not operate. Instead of people British or foreign being free to undertake what foreign exchange dealings they like, with the Account standing ready to control the rates or let them go the way of the market as seems best, we now have direct control: only approved dealings may occur; and the regulations governing these are too many for us to enumerate. But more will be said about the Exchange Equalisation Account in Chapter XVIII; and the purposes of direct exchange control will be touched upon there also.

Let us consider together the old instruments of Central Bank control, and ask whether the time will ever come when these will be restored to their former importance, budgetary methods having been discontinued. Our conclusion will answer also the question which we posed early in this chapter as to the instruments available to Central Banks for the discharge of their external and internal tasks. So far as we can foresee, the time never will come when budgetary methods of control will be done away with; thus the Central Bank weapons will never regain their old importance; and the two tasks, internal and external, which devolved on Central Banks will never be returned to them; on the contrary, the State will continue to perform these duties. But this view may be ill-founded. There are some countries, and the United States is still among them, which are a long way still from embracing budgetary methods as we have outlined them. Again, if France is to use such means, clearly certain changes in fiscal habits will be necessary. Yet if Great Britain and other countries in better times used budgetary control while countries which did not do so suffered booms and depressions, then it is to be expected that the deficit and surplus technique would prevail. Yet it may not be for all time. It is possible to be too fearless in such a matter. But it is clear that if old-style monetary control is ever to be restored two conditions will have to be fulfilled: the present extreme dislocations, especially in the international balance of payments will have had to pass away; and economies will have had to regain a strong natural bias towards prosperity. The first condition will be fulfilled: it means no more than that the world shall get back to conditions not worse than those obtaining in the two or three years before World War II. Sooner or later world conditions will be as stable as that, and they may very well be much more propitious. But the second condition is a different matter altogether. It may be the case that economic systems

¹ The recent legislation only gives permanent existence to an official control exercised after 1939 under temporary war-time powers, which itself succeeded the unofficial control maintained intermittently by the Bank.

will regain their nineteenth-century buoyancy, and that much of what we have said earlier in this book, especially in Chapter XII, will therefore prove to be ill-founded. But it is suggested that a return of natural expansiveness is not likely.

Finally, let us enquire what is the real nature of the budgetary system of economic control. Its nature is that of a direct attack upon the trade cycle. It is not really a way of preventing the trade cycle from happening, though in fact the budgetary method might do that also to some extent. To pursue the budgetary path of control is to let the trade cycle go on, but to chop the top off the boom and the bottom off the slump. It does not seek to produce a moving equilibrium without ups and downs; it will not assure orderly progress free from personal economic suffering and unwarrantable personal gains. It is no policy of perfection designed to remove the causes of the trade cycle. But the budgetary system of control may well be the best which we can achieve, a rough-and-ready affair, but eminently sensible, obviously practical; and these may well be qualities more valuable than theoretical perfection.

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CHAPTER XVIII

INTERNATIONAL MONETARY RELATIONS

The International Monetary Fund and the International Bank were intended to regulate international monetary conditions after World War II; but their time is not yet.

IN April 1943 both the United States and Great Britain published draft plans for the international control of money after the war. The United States plan was drawn up by Dr. Harry D. White, then of the U.S. Treasury, and became known as the White Plan. The British scheme for similar reasons was known as the Keynes Plan. These were put forward as bases for discussion and did not represent Government policies. In June 1943 a Canadian compromise plan appeared; in July a revision of the White Plan; in November a further American plan for a world bank; and finally a combined plan agreed by British and American experts.

These documents are now all matters of historical detail. We need notice only that both the Keynes and White Plans foreshadowed the International Monetary Fund; that the White Plan amounted to a somewhat rigid version of the Gold Standard, with an international monetary pool of very moderate size; that the Keynes Plan was more flexible and provided for a very much larger international monetary fund; and that both of these plans made provision for an international currency to be used among Central Banks, that of Keynes being called *bancor* and that in the White Plan *unitas*, each of which may be regarded variously as a substitute for gold or as a non-interest-bearing substitute for loans. This last provision was not adopted by the nations.

On the basis of these preliminaries, discussion continued among a number of Allied nations until all except the final details had been agreed; some hard bargaining remained to be done. On 1 July 1944 representatives of forty-four nations met at Bretton Woods, New Hampshire, U.S.A. as the United Nations Monetary and Financial Conference. The closing plenary session of the Conference occurred on 22 July 1944, with agreement on the International Monetary Fund, the International Bank for Reconstruction and Development and certain minor matters. According to the provisions of the agreement, more than the requisite ratifications having been given, the International Monetary Fund and the International Bank (as it may be more shortly called) began their legal existences on 27 December 1945.

The workings of both the I.M.F. and the International Bank were designed to turn upon the tables of quotas and subscriptions drawn up at

Bretton Woods which are reproduced below; but the operations will, in fact, depend, of course, upon the quotas and subscriptions actually taken up by the member countries, which are different from the original figures in nearly twenty cases so far; these are also given.

TABLE XXI

INTERNATIONAL MONETARY FUND AND INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

Quotas and Subscriptions Fixed at Bretton Woods and Those Taken Up by Member Countries

Millions of U.S. dollars

Countries	I.M.F.		INTERNATIONAL BANK	
	Bretton Woods quotas ¹	Quotas taken up ²	Bretton Woods subscriptions ¹	Subscriptions taken up ³
(1) Australia ...	200	200	200	200
(2) Austria ...	4	50	4	50
(3) Belgium ...	225	225	225	225
(4) Bolivia ...	10	10	7	7
(5) Brazil ...	150	150	105	105
(6) Canada ...	300	300	325	325
(7) Chile ...	50	50	35	35
(8) China ...	550	550	600	600
(9) Colombia ...	50	50	35	35
(10) Costa Rica ...	5	5	2	2
(11) Cuba ...	50	50	35	35
(12) Czechoslovakia	125	125	125	125
(13) Denmark ...	not fixed	68	not fixed	68
(14) Dominican Republic ...	5	5	2	2
(15) Ecuador ...	5	5	3.2	3.2
(16) Egypt ...	45	60	40	53.3
(17) El Salvador ...	2.5	2.5	1	1
(18) Ethiopia ...	6	6	3	3
(19) Finland ...	4	38	4	38
(20) France ...	450	525	450	525
(21) Greece ...	40	40	25	25
(22) Guatemala ...	5	5	2	2
(23) Haiti ...	5	—	2	—
(24) Honduras ...	2.5	0.5	1	1
(25) Iceland ...	1	1	1	1
(26) India ...	400	400	400	400
(27) Iran ...	25	35	24	33.6
(28) Iraq ...	8	8	6	6
(29) Italy ...	4	180	4	180
(30) Lebanon ...	4	4.5	4	4.5
(31) Liberia ...	.5	—	.5	—
(32) Luxembourg ...	10	10	10	10
(33) Mexico ...	90	90	65	65
(34) Netherlands ...	275	275	275	275
(35) New Zealand ...	50	—	50	—
(36) Nicaragua ...	2	2	.8	.8
(37) Norway ...	50	50	50	50
(38) Panama ...	.5	.5	.2	.2
(39) Paraguay ...	2	3.5	.8	1.4
(40) Peru ...	25	25	17.5	17.5
(41) Philippine Commonwealth	15	15	15	15

TABLE XXI—*contd.*

Countries	Bretton Woods quotas ¹	Quotas taken up ²	Bretton Woods Subscriptions ¹	Subscriptions taken up ³
(42) Poland ⁵ ...	125	125	125	125
(43) Syria ...	4	6.5	4	6.5
(44) Thailand ...	—	—	4	12.5
(45) Turkey ...	4	43	4	43
(46) Union of South Africa ...	100	100	100	100
(47) Union of Soviet Socialist Republics ...	1,200	—	1,200	—
(48) United Kingdom ...	1,300	1,300	1,300	1,300
(49) United States ...	2,750	2,750	3,175	3,175
(50) Uruguay ...	15	15	10.5	10.5
(51) Venezuela ...	15	15	10.5	10.5
(52) Yugoslavia ...	60	60	40	40
Totals ...	8,800	8,034.0	9,100	8,348.5

The purposes of the I.M.F. may be stated briefly as follows: to promote international trade; and with that end in view, to promote international monetary co-operation; to promote exchange stability in condition of multi-lateral international payments; to obviate exchange restrictions.

Each member paid its quota to the I.M.F. in gold and its own currency: the proportion of gold being either one-quarter or 10 per cent of the member country's holding of gold and U.S. dollars on 1 March 1947, whichever was the less.

Par values for the currencies of member countries have been fixed in gold and U.S. dollars, the dollar figure being calculated at \$35 per fine ounce troy of gold. For the original members these par values were announced on 18 December 1946, for later members at the time of their joining. There have been many changes in par values.

Foreign exchange dealing in the currencies of members may not take place outside a margin 1 per cent either side of the par values for spot transactions, and within limits which the I.M.F. considers reasonable for forward dealing.

In order to correct a fundamental disequilibrium, having consulted the I.M.F., a member country may alter its par value by not more than 10 per cent. (The agreement does not state how many times nor how frequently a country may do this.) If a member wishes to change the par value by between 10 per cent and 20 per cent, the I.M.F. must concur or object within seventy-two hours if the member so requests. If the proposed change is by more than 20 per cent the I.M.F. gives its verdict in its own time. The I.M.F. is to agree to changes if these seem to it to be necessary to correct fundamental disequilibria. If a member country breaks these

¹ Cmd. 6546, 1944, pp. 40 and 65.

² I.M.F. *Annual Report*, 1949.

³ International Bank, *Annual Report*, 1949. ⁴ Not represented at Bretton Woods.

⁵ Poland withdrew from both the I.M.F. and the International Bank on 14 March 1950.

TABLE XXII

GOLD AND DOLLAR VALUES OF CURRENCY UNITS OF COUNTRIES MEMBERS OF THE INTERNATIONAL MONETARY FUND¹

(CURRENCIES OF METROPOLITAN AREAS)

Country	Currency	Par values in terms of gold		Par values in terms of U.S. dollars	
		Grams of fine gold per Currency unit	Currency units per troy ounce of fine gold	Currency units per U.S. dollar	U.S. cents per currency unit
Australia	Pound	1-990 62	15-625 0	0-446 429	224-000
Austria	Schilling	Par Value not	yet established		
Belgium	Franc	0-017 773 4	1,750-00	50-000 0	2-000 00
Bolivia ²	Boliviano	0-014 811 2	2,100-00	60-000 0	1-666 67
Brazil	Cruzeiro	0-048 036 3	647-500	18-500 0	5-405 41
Canada	Dollar	0-807 883	38-500 0	1-100 00	90-909 1
Chile ³	Peso	0-014 811 2	2,100-00	60-000 0	1-666 67
China	Yuan	Par Value not	yet established		
Colombia	Peso	0-455 733	68-249 3	1-949 98	51-282 5
Costa Rica	Colon	0-158 267	196-525	5-615 00	17-809 4
Cuba	Peso	0-888 671	35-000 0	1-000 00	100-000
Czechoslovakia	Koruna	0-017 773 4	1,750-00	50-000 0	2-000 00
Denmark	Krone	0-128 660	241-750	6-907 14	14-477 8
Dominican Republic	Peso	0-888 671	35-000 0	1-000 00	100-000
Ecuador	Sucre	0-065 827 5	472-500	13-500 0	7-407 41
Egypt	Pound	2-551 87	12-188 5	0-348 242	287-156
El Salvador	Colon	0-355 468	87-500 0	2-500 00	40-000 0
Ethiopia	Dollar	0-357 690	86-956 5	2-484 47	40-250 0
Finland	Markka	Par Value not	yet established		
France	Franc	No Par Value	agreed with the	Fund	
Greece	Drachma	Par Value not	yet established		
Guatemala	Quetzal	0-888 671	35-000 0	1-000 00	100-000
Honduras	Lempira	0-444 335	70-000 0	2-000 00	50-000 0
Iceland ⁴	Krona	0-054 567 6	570-000	16-285 7	6-140 36
India	Rupee	0-186 621	166-667	4-761 90	21-000 0
Iran	Rial	0-027 555 7	1,128-75	32-250 0	3-100 78
Iraq	Dinar	2-488 28	12-500 0	0-357 143	280-000
Italy	Lira	Par Value not	yet established		
Lebanon	Pound	0-405 512	76-701 8	2-191 48	45-631 3
Luxembourg	Franc	0-017 773 4	1,750-00	50-000 0	2-000 00
Mexico	Peso	0-102 737	302-750	8-650 00	11-560 7
Netherlands	Guilder	0-233 861	133-000	3-800 00	26-315 8
Nicaragua	Cordoba	0-177 734	175-000	5-000 00	20-000 0
Norway	Krone	0-124 414	250-000	7-142 86	14-000 0
Panama	Balboa	0-888 671	35-000 0	1-000 00	100-000
Paraguay	Guarani	0-287 595	108-150	3-090 00	32-362 5
Peru	Sol	No Par Value	agreed with the	Fund	
Philippine Republic	Peso	0-444 335	70-000 0	2-000 00	50-000 0
Syria	Pound	0-405 512	76-701 8	2-191 48	45-631 3
Thailand	Baht	Par Value not	yet established		
Turkey	Lira	0-317 382	98-000 0	2-800 00	35-714 3
Union of South Africa	Pound	2-488 28	12-500 0	0-357 143	280-000
United Kingdom	Pound	2-488 28	12-500 0	0-357 143	280-000
United States	Dollar	0-888 671	35-000 0	1-000 00	100-000
Uruguay	Peso	Par Value not	yet established		
Venezuela	Bolivar	0-265 275	117-250	3-350 00	29-850 7
Yugoslavia	Dinar	0-017 773 4	1,750-00	50-000 0	2-00000

¹ I.M.F.: *Schedule of Par Values*, 1 December 1949.² A new temporary rate of 60 bolivianos to the dollar, to cover most of the international trade of Bolivia, was announced by the I.M.F. on 27 February 1950.³ A new temporary rate of 60 pesos to the dollar was announced by the I.M.F. on 10 January 1950.

regulations, it can no longer use the resources of the I.M.F. in the ways about to be explained, and its membership may be cancelled by the I.M.F.

By agreement the I.M.F. may change all par values by equal proportions: this is the same thing as allowing all the gold stocks of members to be written up or down by changing all the prices for gold; foreign exchange rates would remain as before.

A member country can purchase foreign currencies from the I.M.F. providing the purchases do not swell the I.M.F.'s holding of that currency by more than 25 per cent of the country's quota during the twelve months preceding, and so long as the purchases do not cause the I.M.F. to hold that currency to an amount greater than 200 per cent of the country's quota. But these limits may be waived by the I.M.F. On the other hand the I.M.F. may refuse dealing facilities to a country misusing them. But precise and complicated provisions state that member countries must repurchase limited amounts of their own currency from the I.M.F. with gold or convertible currencies when they can afford to do so and when that is necessary to maintain a suitable balance among the amounts of different currencies held by the I.M.F.

To include a service charge members buy foreign exchange from the I.M.F. at more than the par value, but the margin must be between $\frac{1}{2}$ per cent and 1 per cent. Similar service charges for gold dealings may be made by the I.M.F. Furthermore, if the I.M.F. holds more of a country's currency than the figure of its quota, interest will be charged, the rate increasing with the amount of the excess and with the time for which the I.M.F. holds it; such interest charges are normally payable in gold.

The I.M.F. may declare a currency to be scarce. In that case it can require the country concerned to sell to it amounts of currency for gold, or ask to borrow such amounts. While an official scarcity lasts, members may impose restrictions on dealings in the scarce currency.

All exchange restrictions of member countries are to be brought to an end as soon as possible. Any restrictions still existing on 1 March 1952 must be the subject of consultation between the country retaining them and the I.M.F.

The powers of the I.M.F. belong to its Board of Governors, each member country appointing one Governor. But the Governors vote according to the table of quotas. Each Governor has 250 votes plus one vote for each \$100,000 of his country's quota; and for critical decisions relating to transactions the voting power of a Governor is increased by one vote for each \$400,000 worth of net sales of his country's currency by the I.M.F., or decreased similarly if the I.M.F. is a net purchaser of it.

But the day-to-day power normally belongs by delegation to Executive Directors, not less than twelve in number; of these, five are appointed by the countries having the five largest quotas, two are elected by American Republics not among the largest five members, and five are elected by the other member countries.

The Executive Directors appoint the Managing Director, who serves as

their Chairman, with a casting vote only at their meetings. But he is the chief executive of the I.M.F. and, depending, of course, on the character of the man, the power of the I.M.F. will be wielded by him. The first Managing Director is still in office: he is M. Camille Gutt, of Belgium, who did so much rapidly and efficiently to reorganise the Belgian finances after World War II.

So much for the provisions and facts about the I.M.F. But before discussing these, let us deal in another short summary with the main details of the International Bank. //

The International Bank for Reconstruction and Development, whose table of subscriptions was included on pages 292 and 293, exists in order to facilitate and supplement private long-term lending for reconstruction in war-torn countries and for development in backward areas. Its total authorised capital which may be increased as need be is \$10,000 million, of which \$9,100 million was allotted as we have seen. Each share of \$100,000 is paid for as to 2 per cent in gold or U.S. dollars and as to 18 per cent in the currency of the subscribing country; the remaining 80 per cent constitutes a guarantee fund callable only in the event of need.

Loans may be made by the Bank to national or local governments or to any sort of business enterprise on three principal conditions: that the national government of the country in question or its agent guarantee the loan; that the borrower cannot currently obtain the loan on reasonable terms elsewhere; and that the country whose currency is being lent agrees. Similarly, the Bank may guarantee loans made by others, itself receiving compensation at a suitable rate between 1 per cent and $1\frac{1}{2}$ per cent.

For the purpose of making loans or participating in them the Bank may use its own capital or the proceeds of issues made in its favour in and with the permission of member countries. On 15 July 1947 the Bank floated two modest issues in the United States to provide itself with loanable funds, one for \$100 million for ten years at $2\frac{1}{4}$ per cent and one for \$150 million for twenty-five years at 3 per cent. The former of these was repaid on 17 February 1950 by virtue of a brilliant refunding operation: a like sum of \$100 million, due in 1953–62, was put out to tender with the most gratifying results, four very powerful groups of American banks making attractive bids. The winning tender was that of Halsey Stuart and Co. Inc. and the First National Bank of Chicago: the rate of interest at which this syndicate bought the bonds was 1.9254 per cent, a remarkably low figure. In May 1948 the Bank sold to the Bank for International Settlements (with which we deal later in this chapter) Swiss Franc Serial Bonds to the value of Swiss francs 17 million at $2\frac{1}{2}$ per cent due in 1953 and 1954. A further sale of bonds was made in Switzerland on 6 March 1950, to a group of leading Swiss banks, in the amount of $28\frac{1}{2}$ million Swiss francs, at par, carrying interest at $2\frac{1}{2}$ per cent. Thus the I.B.R.D. has added by borrowing to its loanable funds an amount of over \$260 million. In March 1950 a further bond issue was pending, to be made in colones in El Salvador, to the value of about \$5.2 million.

The Bank has Governors with unequal voting powers in just the same manner as has the I.M.F. The Bank also has Executive Directors who correspond to those of the I.M.F. except that there is no provision for two to be elected by American Republics. The chief executive officer is called the President. The first President was Mr. Eugene Meyer of the United States. He resigned early in December 1946. After an interregnum, Mr. John J. McCloy, also of the United States, became the second President of the I.B.R.D. in March 1947. But in May 1949 he assumed the duties of the U.S. High Commissioner in Germany; and Mr. Eugene Black was appointed in his stead to the Bank. Mr. Black is also an American, and it is likely that future Presidents will be of the same nationality, a suitable arrangement since it is dollars more than any other money which nations are anxious to borrow.

We may notice that the word currency as used in the above summaries sometimes means money and not currency in the literal sense. There are minor provisions whereby both the I.M.F. and the Bank can make good any shortage of a currency resulting from its depreciation. The normal agencies through which both the I.M.F. and the Bank deal with member countries are Treasuries, Central Banks or Exchange Equalisation Accounts. It is laid down quite carefully at more than one point in each agreement that both the I.M.F. and the Bank shall conduct their affairs with reference to economic conditions alone: neither is permitted to take into account the political organisation of a customer country nor the political complexion of its Government.

In general the comment which these arrangements of 1944 arouse in 1950 is this: too little and too soon. Some of the many progenitors of these institutions, and the enthusiastic commentators on the rapid success of the Bretton Woods Conference, seem to have thought that the post-war monetary problems had been solved by the accumulated wisdom assembled in New Hampshire. These were doomed to disappointment, for the dislocations of the post-war era have proved by far greater than the I.M.F. and the International Bank could cope with. We may notice what Lord Keynes said on this subject when speaking in the House of Lords on 18 December 1945 about the American Loan: "When I last had the opportunity of discussing the Bretton Woods plan in your Lordships' House, the plan stood by itself, and its relationship to post-war policy as a whole was not clear. This was responsible for the least easily answered criticisms. All one could say in reply was that the plan was not intended to stand by itself, but one must begin somewhere." Yet we should notice and respect the note of caution which sounds ever and again in the I.M.F. agreement: exchange restriction might still be in existence, it was foreseen, five years after the I.M.F. opened for business; no country was required to commit itself to the abolition of restrictions by a given date. Again, freedom of exchange dealing was made to refer to current transactions: it was realised that old capital accounts might have to be controlled for a long time.

The par values are, of course, the central idea in the I.M.F., for the

ultimate purpose was the very proper one of increasing the volume of international trade; and that cannot flourish unless traders can be certain of what their sales will realise and their purchases cost when converted into their own currencies. Moreover, there must be freedom for countries to convert credit balances in other countries which are their net customers into the currencies of different countries which are their net suppliers; in this way exports may be used, as they should be, to pay for imports. The clause allowing a country complete discretion to alter the value of its monetary unit within 10 per cent of the par value clearly implied the hope that this margin would normally prove great enough. But the times are not normal, nor will they be for years. Thus when France sought relief from internal and external difficulties by way of devaluation in January 1948, the margin was not within 10 per cent, nor even within 20 per cent, but was, in fact, 44·444 per cent. And she carried out this devaluation in the face of opposition from the I.M.F. It was not, indeed, the devaluation alone to which the I.M.F. took exception, but the establishment at the same time in Paris of a free market in gold, U.S. dollars and Portuguese escudos; for the latter measure involved the simultaneous existence of perfectly legal free rates of exchange and official rates, which is a multiple exchange practice completely antithetical to the principles of the I.M.F. It was for this reason, as was made plain by M. Camille Gutt's published statement of 25 January 1948, that the I.M.F. felt constrained, taking into consideration the interests of other member countries, to disqualify France from using the resources of the I.M.F. But the Fund treated the French Government in its difficulties with every consideration, and forbore to expel France from membership. It may be said, perhaps, that even in France itself the I.M.F. emerged from this difficult situation with an enhanced reputation both for its principles and for its management.

There had been other alterations from the original par values before September 1949. But there had been no general devaluation affecting a majority of the member countries until that time. It was of course the action of Great Britain which precipitated that 'wholesale' devaluation, in a manner strongly reminiscent of 1931. Strong or weak, the pound sterling is influential still in international monetary relations. All members of the British Empire were affected, and not only they: some thirteen foreign countries have since devalued their currency units in relation to gold and to the dollar. It cannot be regarded as either a happy event or as a fortunate omen that Great Britain was forced to devalue, and that by the large margin of 30·5 per cent. Such a correction had become indeed inevitable, and the change had the support of the I.M.F.; which institution would have been entitled, as we have seen, to object. But the I.M.F. judged, as did others, that the devaluation of the pound sterling was necessary to correct a fundamental disequilibrium. Thus the work of Britons and of nationals of more than a dozen other countries is worth much less than it was in international trade: the work of the exporters of our islands has been cut in value by nearly a third. It was not an agree-

able change, even if it had become inescapable. Nor does our devaluation augur well for exchange stability among the nations in the future. Such has been so far the external cost of our uncurbed inflation. The whole of the monetary picture is not a simple thing to be described in a few words: but in the centre of the foreground, and occupying a large part of the whole unhappy canvas, there has been and still is the ugly feature of inflationary taxation, with which we dealt briefly in Chapter XII. Our inflationary level of taxation was causal in bringing about our devaluation: it was the largest strand in the thread of causation. It behoves us therefore to get this problem under control, lest worse betide.

This incident does show vividly, as the multitudinous and persistent exchange restrictions demonstrate in a light less harsh, that the time for the I.M.F. is not yet. If any doubt remains of this, it may be pointed out that dollars are not yet officially scarce, because the transaction of member countries have not yet brought about a sufficient scarcity on the books of the I.M.F. Yet it is all too painfully manifest that in the larger sense dollars are scarce to all countries except the United States, and agonisingly so.

We may understand the premature birth of the I.M.F. somewhat better, perhaps, by asking what its real nature is. The I.M.F. is essentially an amalgamation of the Exchange Equalisation Accounts of Gold Reserve Standard days put under international control. There are now fifty countries trying to play the semi-Gold Standard game, whereas there used to be six principal players and a few lesser ones. Yet it is the same game, and the chief players are the same, as the voting strengths show. It remains to be seen whether it is a better game played somewhat publicly in Washington, with fairly precise rules codified for it and a large number of amateur players taking a small part, or whether it was better when six stars played with skill and without distractions, making up the rules as they went along. It may be a reasonable guess that the best game of all will prove to be a combination of the present form with the earlier one.

There might be added both strength and flexibility to the I.M.F. system if the Exchange Equalisation Accounts, provided anew with resources in some cases, came into the exchange markets again in the more important financial centres. We may observe the mention of national Exchange Equalisation Accounts in the Bretton Woods agreement. But the time for this is not yet: certainly not in the case of Great Britain, for example; though for all her difficulties such a development may be nearer, indeed, it may be on the way, in the case of France. It is in the case of some Western European countries particularly that the forces in the foreign exchange markets are going to be great and largely incalculable. And it is not likely that the resources of the I.M.F. will suffice amid all the regulations governing their use to counteract, for example, sudden movements of hot money when such movements are no longer prevented by direct exchange controls. Furthermore, it may well prove that the I.M.F. is too rigidly constituted by itself to be operated effectively. Arbitrary limits of

borrowing up to an increase of 25 per cent of the quota per annum and 200 per cent absolute are all very well to suggest to nations a proper caution, but who is to say whether these will prove compatible with the monetary movements which it is desired to offset? Even the I.M.F.'s power of waiver is not the same thing as national monetary authorities having at command Exchange Equalisation Funds of their own. National sovereignty cannot be abrogated except by conquest or consent. The fact that in earlier times countries were free to leave the Gold Standard if they chose, whereas now there is an international undertaking to maintain semi-Gold Reserve Standard conditions, constitutes no essential difference. The I.M.F. agreement is a transparent piece of paper stretched across the cracks which exist in the world polity at every national frontier. Member countries are free, of course, to leave the I.M.F. and forgo its benefits; and if its regulations prove too confining to national policy, leave it they will.

It must be remembered that the Gold Reserve Standard as operated under the Tripartite Monetary Agreement of 1936 was not without shortcomings: a great number of small countries saw a few which were financially strong working the system to the advantage of those few. It is true that the advantage of the few was in very large measure that of all; but it is important that international monetary arrangements shall not only be good but also look good. And the Gold Reserve Standard was never so popular in the United States as in Great Britain, a matter deriving apparently from the old American suspicion that the City of London, and to some extent other European centres but especially London, possessed some demoniacal financial skill which would be used to the cost of honest, trusting Americans. Though there is no public proof of the matter, it seems likely that the rigidities of the I.M.F. and the little clauses providing ways in which its resources can be transmuted gradually into gold derive from American desires for a clear-cut system.

Yet when many faults have been found with the I.M.F., this institution may have an important part to play in the scheme of things—in the future. Even if it is not very clear what can be done to keep the foreign exchange rates stable, nor when, it is no bad thing to have an institution in being even at the present time, working upon the problem; the highly qualified personnel of which is certainly gaining an insight into the limitations of I.M.F. usefulness. The principle of a powerful institution in the monetary field devoted to monetary stability as such, and not the interest of a particular nation in exchange advantage, may be thought a principle proper to our times.

Of the International Bank for Reconstruction and Development similar things may be said. Its own resources are not large enough to do more than mitigate slightly the financial problems of reconstruction, whereas private lending, which the International Bank is supposed to facilitate, does not easily find its way into a field fraught with immense and manifest risks. On 31 December 1949 the position of the International Bank's loans was as follows:

TABLE XXIII
I.B.R.D. LOANS ON 31 DECEMBER 1949¹

Borrowers or Guarantors	Dates of Loans	Total Loans Effective Less Repayments and Cancellations \$000,000
Belgium	1949	16
Brazil	1949	75
Chile	1948	16
Colombia	1949	5
Denmark	1947	40
Finland	1949	14.8
France	1947	250
India	1949	44
Luxembourg	1947	11.7
Mexico	1949	34.1
Netherlands	1947, 1948, 1949	220.8
Total	—	727.4

These figures speak for themselves. Compared with the thousands of millions of dollars which the United States has found already, and those which it expects to go on finding, the operations of the International Bank are a drop in the ocean.

If it were not the case that one country is in an economic position of preponderant strength, then there would be greater scope for the International Bank. But when it is the United States which does all or very nearly all of the finding, what justification would there be for an international institution like the International Bank acting as the arbiter of loans?

There is no reasonable criticism to be made of what the International Bank has done and will do. Every little helps! The loans which it has given have been beneficial to the recipient countries and thus to the world at large. And perhaps it is surprising in the debilitating conditions of its infancy that the International Bank has been able to do so much, particularly in the way of raising capital for itself by borrowing in unpromising circumstances.

Yet it would seem that so far as reconstruction is concerned the International Bank will be a minor contributor. And, broadly speaking, 'development' will have to wait upon 'reconstruction.' Successful development undertaken now at the expense of reconstruction would yield a net loss to the world as a whole. When the gigantic tasks of reconstructing the war-torn countries are well in hand (by 1952?), then the time may be ripe for the International Bank to promote important development in other countries. Lending conditions by then may offer reasonable risks, and at that time too the sources of lending may be quite anxious to find

¹ I.B.R.D. *Statement of Loans*, 31 December 1949.

outlets and to underpin their operations with International Bank guarantees. Those conditions have not come yet, and the International Bank will continue as a somewhat inefficacious infant until they do.

Finally, however, let us spring fearlessly to the defence of these two institutions against the Marxists on this side of the Iron Curtain and the *soi-disant* Marxists on the other! The real source of the complaint, certainly of the former, seems to be that the U.S.S.R. is a member neither of the I.M.F. nor of the International Bank. But why should she be? With a monopoly of foreign trade in the hands of the State, what is the value to Russia of stable exchange rates? The U.S.S.R. statement on Article XIX (a) and (e) of the I.M.F. agreement in the Final Act of Bretton Woods indicated the real position.¹ There the Russian delegation requested that Gosbank foreign balances abroad should be treated by the I.M.F. differently from other Central Bank foreign balances, for the good reason that Gosbank is also the commercial banking system of the U.S.S.R. In fact, in the small amount of foreign trade done by Russia the exchange rates fixed between the rouble and other currencies are part of the bargaining about price. The same sort of bargaining would go on if rouble exchange rates were fixed; indeed, to the small extent that Russian foreign trade is not a thinly disguised process of barter, the only thing which matters to the U.S.S.R. apart from accounting convenience is the purchasing power of the foreign exchange which she acquires. It would not make a great deal of difference if the rouble were never mentioned in Russian foreign trade and all transactions were made in foreign currencies. Again, loans of the size which the International Bank can make are not likely to be of much interest to the U.S.S.R.

Apart from this matter the Marxists complain that the International Bank is constituted to aid and abet private lending. Was it reasonable to suppose that investable funds would be, not nationalised (or socialised), but internationalised (or super-socialised)? And if they had been, it can only be imagined that this would have appeared to such critics as a sinister money trust of awful dimensions.

There are some, of course, to whom the word gold is an alternative spelling of unemployment. These would do well to ponder carefully the movement of unemployment in Great Britain's export industries between the wars: that there too high exchange rates led to unemployment is not the only conclusion to be drawn; the other is that stable exchanges are necessary for healthy export industries. And the urgency of satisfactory export conditions in Great Britain needs no emphasis to-day when our meals depend on them.

Ideas that the I.M.F. is a subtle device to enable the United States to get rid of its vast gold stock at a good price should be treated with all due reverence: such ideas have entertainment value.

¹ See Cmd. 6597, 1945, p. 23.

The dislocation has proved so great that other means have had to be found: the American loan to Great Britain was a commercial agreement.

It is tempting to say that a chapter in the world's history closed between 6 December 1945 and 5 June 1947. On the former date the Anglo-American Agreement was signed in Washington; on the latter, Secretary of State Marshall made the famous speech at Harvard offering American aid to European countries. In Great Britain the difference between the two transactions appeared so momentous as to constitute a revolution in thought: in the United States the change represented the evolution of policy.

Let us look first briefly at the facts. After twelve weeks of cordial but distinctly difficult negotiations, Lord Halifax, Lord Keynes, Mr. R. H. Brand, Professor Lionel Robbins with others for Great Britain reached agreement with Mr. William Clayton, Assistant Secretary of State, Mr. Vinson, Secretary of the Treasury, Mr. Henry Wallace, Secretary of Commerce, Dr. Harry White, of the Treasury, and Mr. Marriner S. Eccles, Chairman of the Board of Governors of the Federal Reserve System, for the United States.

The total amount of the loan was \$4,400 million (£1,100 million), of which \$650 million (£162 million) represented Lend-Lease materials received by Great Britain after the end of the war, and the rest, \$3,750 million (£937 million), was new money made available to Great Britain by the United States. The Lend-Lease settlement wrote off some \$20,000 million to \$25,000 million (£5,000 million to £6,250 million) of supplies, consumed by Great Britain during World War II, which fell upon the American taxpayers in the form of an increase in their National Debt. The part of the loan which was new money could be drawn at any time up to 31 December 1951. On that date repayment of the principal will be due to begin with interest at 2 per cent per annum (inclusive of 1951) on the part of the loan in any year outstanding. Repayment will take place over fifty years in approximately equal instalments of about £35 million each unless the British Government accelerates it. The interest can be waived finally, not postponed, if necessary in any year in which, broadly speaking, our exports are less than "60 per cent in excess of pre-war"¹ by volume.

Sterling balances from current transactions were to become convertible into any currency one year after the Loan Agreement having been ratified went into effect. The latter date proved to be 15 July 1946, and that of convertibility 15 July 1947.

Great Britain was not to use the American loan to repay existing debts owed to other countries; nor was she to raise other loans in the Empire on terms more favourable to the lender. The dollar pool system of the Sterling Area, whereby broadly speaking Empire countries (except Canada) paid their dollar earnings into a common fund, from which they

¹ Lord Keynes in the House of Lords, 18 December 1945.

drew by agreement, was to be brought to an end. Neither Great Britain nor the United States was to discriminate against imports from the other in the sense of allowing easier terms for imports from third countries. Sterling balances owed as a result of wartime borrowing by Great Britain, chiefly from India, Palestine, Egypt and Eire, were to become freely transferable as soon as possible, the British Government having tried to secure a scaling down where possible: the scaling down was intended to refer particularly to the huge debt of £1,300 million owed to India, about one-third of the whole. Moreover, the British Government agreed at once to join the I.M.F. and the International Bank. Furthermore, the British Government pledged itself to support the American *Proposals on Trade and Employment*, which were rather extreme propositions against discrimination in international trade and on behalf of freedom of trade from barriers such as tariffs, put forward for acceptance by the United Nations.

The drawings of the loan were as follows:

TABLE XXIV
BRITISH DRAWINGS ON AMERICAN LOAN

	Weeks ended	Drawing (\$000,000)	Cumulative total (\$000,000)	
1946	20 July ...	300	300	
	7 September ...	100	400	
	26 October ...	200	600	
1947	11 January ...	200	800	
	22 February ...	100	900	
	15 March ...	200	1,100	
	5 April ...	200	1,300	
	26 April ...	250	1,550	
	17 May ...	200	1,750	
	7 June ...	200	1,950	
	20 June ...	200	2,150	
	12 July ...	100	2,250	Cumulative from
	19 July ...	150	2,400	15 July to 29 August
	30 July ...	300	2,700	150
	13 August ...	150	2,850	450
	21 August ...	150	3,000	600
	29 August ...	350	3,350	750
	10 December ...	100	3,450	1,100
1948	6 January ...	100	3,550	
	6 February ...	100	3,650	
	1 March ...	100	3,750	

On 15 July 1947 the obligation to make sterling acquired in current foreign transactions convertible was fulfilled. The fulfilment lasted five weeks. The British Government suspended it unilaterally on 20 August 1947, whereupon the American Treasury froze the \$400 million of the loan remaining. This was, however, released on 5 December and drawn as shown in Table XXIV.

Why the fiasco? Great Britain could not have had a better team of negotiators. These, it is true, had gone to Washington with ideas in mind

very different from those which were finally enshrined in the Loan Agreement. Lord Keynes, speaking in the House of Lords on 18 December 1945, said moderately that the amount of the loan was "cut somewhat too fine"; and, in view of the fact that our plight was due to our efforts in a common struggle, that it might not have been "asking too much of our American friends that they should agree to see us through the transition by financial aid which approximated to a grant." The Americans could not see the matter in such a light. Conscious of the fact that the Agreement would have to be passed through Congress, they could view Great Britain's application only from a commercial point of view. The British delegates struggled against the interest provisions, against the rigid stipulations regarding convertibility, regarding the Sterling Area's dollar pool, and regarding non-discrimination; against the attempt to have sterling balances scaled down by poor countries which were her creditors and which were in need of capital resources; and against committing Great Britain to support the United States' trade proposals. That the Americans did moderate their attitude is known from Lord Keynes's speech in the House of Lords. Yet it might be said that that great speech was as much a condemnation as a defence of the Loan Agreement. The Bill to ratify the Agreement passed the House of Commons easily enough with most of the Opposition abstaining at Mr. Churchill's behest, and even some Labour Members voting against it; and the ratification eventually passed Congress on 13 July 1946 by a much narrower margin. Perhaps this justifies the attitude of the American delegates.

Once the commercial approach of the Americans is accepted, the details of the Agreement follow logically enough. This was a loan of a size unsurpassed in peace-time designed to put a commercial rival on its feet. Every Allied ex-belligerent was clamouring at that time for a loan, the aggregate in request amounting to some four or five times the amount of the British loan. It was not easy to make such a loan attractive to a commercially minded public opinion. Nor were Americans unmindful of Great Britain's war efforts; yet, perhaps, from these they drew rather wrong conclusions: looking towards the future they felt that a country which had made Great Britain's war efforts must be a strong one capable of vigorous action leading to recovery. Figures of output per man-hour may indicate exhaustion or they may be interpreted to show unused industrial capacity, that is to say, that output could be increased by greater efforts. Anyhow, such industrial figures were better not emphasised in a commercial approach. In all fairness it must be admitted that, as a commercial loan, this was a very generous affair demonstrating a splendid faith in Great Britain's future.

Yet, in the circumstances, was the British Government right to accept the loan? There was no choice. From no other source could aid have been secured on the scale required. Indeed, as the event showed, even a sum of new money little short of £1,000, million was not enough. It was impossible to do without the loan: if that had been attempted, our privations would

have been so great that only a progressive decline in output could have been expected.

One matter which it would be difficult to prove may be taken for granted: the British Government did not act in bad faith, taking what they could get while knowing that Great Britain would fail to fulfil its side of the bargain. They hoped for the best.

One miscalculation, however, everyone made apparently; but it should be remembered that the Agreement was made in 1945, negotiations having begun almost immediately after the end of the war. A post-war depression was expected in the natural order of things; and if that had come, prices would have fallen a long way; the value of the loan as purchasing power would have increased to that extent. In the event prices went up fast and far throughout the world and in the United States particularly,¹ the loan contributing, of course, to make prices rise. Moreover, from the British point of view there was not just a rise of prices all round: the terms of trade altered against us. Between December 1945 and August 1947 the price index of imports moved from 195 to 257, whereas the price index of exports moved from 194 to 237: not a great matter to a country in a strong economic condition but a straw of some weight on the back of the debilitated British camel.

Perhaps it could not be foreseen that no post-war depression would result; yet it is difficult to perceive now what could have brought about a depression if neither America nor Great Britain was prepared to use the classical Central Bank mechanism for ending inflation, and if neither country was determined to create really large budget surpluses, nor to reduce the level of taxation. It is possible that if the greater part of the rest of the world had pursued strongly deflationary policies, these might have infected the United States and Great Britain with falling prices; but any such influence from abroad was remotely unlikely.

The non-discrimination articles in the Agreement, which might seem liberal and sensible provisions, as the Americans certainly intended them to be, proved in the course of 1946 and the first part of 1947 to be manacles of iron. Great Britain needed to discriminate against the hard-currency countries in order to conserve her dollar funds. We needed to buy food in South America, for example; but South American countries ready enough to sell to us had to cut down imports in order to conserve their own stocks of dollars, and because we could not discriminate in their favour, neither would they discriminate in our favour. Thus British goods were kept out by trade barriers, and our essential imports of food, which might have been paid for by our exports, had to an ever-growing extent to be met by dollars.

The question remains whether the British Government could have done more than it did to avert the drain of dollars whereby a loan designed to last from three to five years was used up in just over thirteen months (excluding the last \$400 million from consideration). To examine this

¹ The U.S. wholesale price index for all commodities moved from 105·8 in 1945 to 151·8 in 1947; for farm products from 128·2 to 181·3.

matter thoroughly would take us too deeply into political questions. But it may be pointed out that the massive food subsidies introduced a damaging distortion into our economic system. It is true that we could not have managed with lower imports of food; that the food rationing, or nearly all of it, was, as it remains, preferable for the country as a whole, despite the waste of resources entailed by it, compared with severe privations of food among any section of the people; that in the comparatively spacious days before World War II, a horrifyingly large number of people went short of food regularly, as the B.M.A. report of 1936 on malnutrition testified; that this has not been so since the war, which is the explanation of why our food imports are so large even with rationing. All that is true. But what the food subsidies did, and continue to do, is to leave the people with money to spend on other things. Some of the things bought are almost as essential as food. Moreover, the power of the wealthier classes to demand luxuries is so far curtailed by one sort of taxation and another that there are negligible direct effects of their luxury spending left to worry about—though there may well be indirect effects of serious sorts resulting from the excessive weight of taxation. But the poorer sections of the people, who have never had so high monetary incomes as since the war, are left with a residuum of purchasing power to spend on luxuries. Per family it is not much, and every man of decent feelings—and irrespective of political party—would wish that it were more, if as a country we could afford that; but in the aggregate this residuum is a great demand which leads to the use in inessential production of human and material resources which might be and might have been put into the export drive. Unhappily, this is the sort of lesson which experience teaches slowly; only when the effects have become really painful are we likely to search with complete honesty for their cause. We cannot as a country afford food subsidies on the scale of £500 million a year; and we could not during the time when we were drawing on the American loan so excessively fast.

Moreover, the food subsidies were not the only cause of distortion, though they were certainly the most glaring one. The general conditions of suppressed inflation which were allowed to persist were similar causes of the waste of resources. The Black Market, which Government regulation *à outrance* forces and fosters, flourishes especially, for example, during suppressed inflation. Again, when money is easy to come by, is it worth working for? And when people have it, food being easily paid for, what is there to spend it on? So why work hard? These are the questions which people ask themselves in such monetary conditions as we have had. The truth is that there are not many wholesome outlets for consumption expenditure. The consumption of beer in the years 1945 to 1947 was some 25 per cent above the pre-war level; which is not really the mark of a country making every effort to pay its way.

The unpleasant verdict must be passed that as a borrowing country Great Britain might have done more than she did to pay her way among the nations; which is not to say that there were not millions who were

tired and yet worked unremittingly. But government has invaded the economic field, and government must take its responsibility.

As we ran apace through the American loan, voices were not lacking to cry against our Government's weakness; although before the drawings on the loan had begun the greatest voice of all was silent, for Lord Keynes died on 21 April 1946.

Yet if we had done all that we might: if we had budgeted for a large surplus; cut down taxation; tightened interest rates; forced a margin of unemployment (the bulk of which would have been transitional); abated the slacknesses inseparable from overfull employment; cured the labour shortages in essential industry; rationed by the purse wherever we decently could; pruned that executive (and legislative) polyarchy which used to be so small and so fine a Civil Service; cut the food subsidies; abolished every unnecessary regulation; prohibited by legislation every restraint of voluntary work; if we had abandoned the idea that the present was a time capable of giving more money for less work, together with the theory that anything more which was wanted could always be had by soaking the rich; and if we had even found that a sullenly disobliging attitude was satisfying neither to the customer nor to the disobliging—even if all these measures and changes had occurred, would this have made very much difference to our abrogation of the convertibility clause? Probably not. Over \$1,000 million, that is, over a quarter of the loan, went in the five weeks of convertibility, as is shown in Table XXIV: that does not suggest that with our very best efforts we could have maintained convertibility indefinitely.¹ We might, indeed, have produced more for export, but our exports were hampered by provisions of non-discrimination. Perhaps we have not so very much for which to blame ourselves. Certainly we could not have reversed the trend of world prices against the untiring heave of American demand.

If there are lessons to be learnt from the fiasco of the American loan, it may be true that these are proper not only for us to study. And it may be more important that we learn thoroughly rather than quickly; that we shall have to understand sooner or later is not in doubt. Moreover, we cannot expect the Kremlin always to be so obliging.

But the European Recovery Programme is strategic philanthropy.

The dangerous political pranks of the U.S.S.R. have been, of course, the reality behind the change of American attitude. It was not that Americans were suddenly filled with remorseful compassion for Europe.

¹ It should not be forgotten that Great Britain was the recipient of a large loan from Canada at the same time. Since World War II Canada has performed lending operations on a surprisingly large scale for a country of some twelve million inhabitants. Not only was there her British loan of \$1,250 million (£312½ million), but also further loans totalling \$594½ million. By 21 June 1948 Great Britain had drawn \$1,015 million of her loan from Canada. Thus it may be said that both the American and Canadian loans together (\$5 milliard of new money) were not enough to solve our transitional balance of payments problem.

They had nothing to feel remorseful about, and they were just as commercial as before, and just as generous.

General Marshall became Secretary of State in January 1947, a time when political and economic conditions in Europe and elsewhere were not encouraging. In the previous year there had been trials in Canada of persons of some prominence for treasonably disclosing scientific information to Soviet Russia. In the previous November steel output in Germany was falling; there were riots in Rome; the Communists emerged as the largest single party in the French general elections; there was a minor revolt in the British Labour Party against the foreign policy of being firm with the U.S.S.R.; the question of British intervention in Greece was raised before the United Nations by Russia; the Greek guerrillas were having some success; in December there was a food crisis in the British Zone of Germany; soon after Mr. Marshall's appointment the Hungarian Government began to destroy the other political parties; Mr. Henry Wallace advanced a stage in the formation of his Progressive Party; progress towards Austrian and German treaties was slow; in February came the economic breakdown in Great Britain due to the fuel crisis; the U.S.S.R. was raising with Norway the question of receiving powers to form a base at Spitzbergen; relations were strained between Persia and the U.S.S.R. over a revolt in Azerbaijan. These details belong to a short period only before and after Mr. Marshall's appointment: it may be said that the trend of developments was not reassuring.

The United States Government no longer took a commercial view of all international monetary relations. Let us look at the facts in brief detail, for this will be necessary to an opinion of the Marshall Plan.

At Harvard on 5 June 1947, Mr. Marshall was remarkably specific: he spoke of Europe; of her food deficit for the following three or four years; of her inability to pay; of the economic, social and political deterioration which she would face unless she received substantial additional help. He found that it was logical that the United States should do what it could to help; their policy was directed not against any country or doctrine but against hunger, poverty, desperation and chaos. Assistance should not be on a piecemeal basis, but should provide a cure rather than a mere palliative. Any Government assisting recovery would find full co-operation on the part of the United States Government; but any Government manœuvring to block the recovery of other countries could expect no help from them. But the initiative must come from European nations co-operating to help themselves. "Europe" Mr. Marshall later defined at a Press conference as "everything west of Asia."

On 9 June the British Government welcomed the pronouncement. On 13 June Mr. Bevin spoke in the same sense. On 14 June it was made known that the French Government had asked the U.S.S.R. to exchange views on the United States proposals. On 17 June Mr. Bevin went to Paris. On 19 June a Franco-British note was sent to the U.S.S.R. asking them to attend a three-power discussion, a proposal which was accepted on 23

June by a Russian note which can be described only as reeking of suspicion and distrust. The three foreign ministers, M. Bidault, M. Molotov and Mr. Bevin, met in Paris on 27 June.

The British and French views were virtually identical: that the European countries must produce a plan showing how much reconstruction they could achieve by themselves and asking the United States to help with what they could not do for themselves. The Soviet view was that European countries should be asked to make known their individual needs for goods and credits; an all-embracing European economic plan was unacceptable since it would lead to the domination of the smaller powers by the greater.

The climax and the end of the conference came on 2 July 1947, which may well be the day looked back upon in the future as that on which the political pattern of the post-war world was drawn clearly. M. Molotov warned France and Great Britain that their proposals would split Europe into two parts, and cautioned them of the consequences of such an action. M. Bidault cautioned the Soviet Government of the consequences of dividing Europe into two parts. Mr. Bevin regretted but defied the Soviet threat, and, maintaining that neither France nor Great Britain sought to dominate any other country, he indicated that they would go ahead with their plan in company with any country which would join them.

On 3 July Britain and France decided to invite to a conference in Paris on 12 July 1947 all the European countries except Russia, Germany and Spain, twenty-two nations. But at the same time they issued a statement explaining the urgency of the meeting and ending with an offer to all European states to participate in the work of the organisation. A copy of the invitation was sent to the Soviet Ambassador in Paris accompanied by a letter saying that Britain and France hoped that the Soviet refusal was not definite and calling attention to the offer at the end of their statement.

On 4 July 1947 the invitations were sent. It may be noted that Czechoslovakia accepted the invitation on 7 July, and withdrew its acceptance three days later.

It is not germane to our purpose to trace in detail the subsequent events. Sixteen nations having met in Paris, their report was adopted on 20 September. Having compared needs and resources, they reported to the United States deficits as shown in the following table.

TABLE XXV
MARSHALL PLAN: PROSPECTIVE NEEDS OF
SIXTEEN WESTERN EUROPEAN NATIONS

				\$000,000,000
1948	...	...	...	8.04
1949	...	...	...	6.35
1950	...	...	...	4.65
1951	...	...	...	3.40
Total				22.44

We may notice that American aid to foreign countries during the two and a quarter years following the war had been running at the rate of about \$5½ milliard per year. Thus the estimates of the Marshall Plan, on the average of the four years, were comparable in size for Western Europe alone.

On 17 December 1947 an interim aid bill was signed by President Truman, making \$597 million immediately available for the benefit of France, Italy, Austria and China.

Brilliantly championed throughout by Senator Vandenberg, the European Recovery Programme (the Marshall Plan translated into action) was finally included in an omnibus foreign relief bill amounting to \$6,030 million, the E.R.P. portion of which was \$4,000 million, for the first year or the first fifteen months as the President should decide. This was the form reached on 28 June 1948, but E.R.P. had been operating already for three months, in advance of the final appropriations made by Congress; for President Truman had signed the Economic Co-operation Act on 4 April; the first shipments had left the following day when the President ordered the Reconstruction Finance Corporation to make \$1,015 million immediately available in the form of a loan; on 6 April Mr. Paul A. Hoffman had been appointed Administrator of the Economic Co-operation Administration, which is the name of the American departmental body charged with the responsibility of E.R.P.; and on 21 April Mr. Averell Harriman, the Secretary of Commerce, became 'roving Ambassador' in Europe for E.R.P. (The great importance of E.R.P. in American as well as in Western European eyes is illustrated by Mr. Harriman's resignation of a Cabinet office in order to assume this post in E.C.A.)

At the end of January 1950, allocations under E.R.P. had been made to the amount of \$8,325,720,000, a great figure. Of this total, over \$3·7 milliard had been spent on food and agricultural commodities, and nearly \$3·9 milliard on industrial commodities. Of the beneficiaries, Great Britain has been the chief, receiving more than \$2¼ milliard, France coming next with nearly \$1¾ milliard, followed by Italy, Germany and the Netherlands with between \$750 and \$1,000 million each.

This leads us to the terms of E.R.P. These are enshrined in separate bilateral agreements between the United States and the Western European countries. The first of these, styled the Anglo-American Economic Co-operation Agreement,¹ was initialled on 28 June 1948 in Washington, and confirmed by a majority of 409 to 12 in the House of Commons on 6 July. There is nothing at all in this agreement which is burdensome upon Great Britain: we pledge ourselves to support the Organisation for European Economic Co-operation (the counterpart, among the receivers, of E.C.A.) and to exert sustained efforts to achieve the purposes of E.R.P.²

¹ See Cmd. 7446 of 1948.

² There is one point of some interest in itself: Great Britain undertakes to use her best efforts (of which she is the judge) to do various sensible things in her own interests including to balance her budget. The balancing of the budget is interpreted in a note as not meaning balancing year by year but in the long run. The argument of Chapter XVII refers.

There really was no need for protest from the latterday Laocoöns, a fringe of Conservatives strangely allied with the Marxists.

The American action in providing thousands of millions of dollars for relief and reconstruction in Western Europe remains the most astonishingly generous piece of policy in the human record. Similar things have been done for allies in time of war, but in time of peace, never. Yet we have very easily become accustomed to the European Recovery Programme, and take it for granted; which latter is a phrase all too appropriate, for the bulk of the resources made and to be made available by the United States will take the form of gifts, or grants as they are called; but this nomenclature should not be allowed to let us forget that not only Great Britain but Western Europe in general is living in part on the charity of the United States. These E.R.P. moneys are coming and will come, of course, out of the pockets of American taxpayers; the financing of the matter will probably take the form for the most part of not reducing the American National Debt, whereas but for E.R.P. it could be reduced or reduced in larger measure. E.R.P. is a burden which their legislative representatives and their executive have accepted for, have volunteered to place upon, the American people. Americans are quite alive to the nature of their sacrifice, and they do not particularly like the sort of Governments nor the sort of economic policies which are common in Western Europe; but there is no trace of grudging resentment among them; far from it: they say that they are glad to be able to do it; and they mean that. They give in a spirit of generosity, pure and simple, in a very literal meaning of all those words. It is suggested that we owe to the United States our very best efforts to make Western Europe into a going concern again; and if we value our self-respect, our moral capital, we shall make those efforts.

What about Russia? First let it be pointed out that the facts cited above refute any idea that Russia was pushed out of the capitalist 'get-together.' Secretary Marshall's offer was made to Europe, including Russia and all her satellites. But Russia would have none of it. It may be true that part of Russia's reason may have been a quite natural fear of German resurgence; the anomalous condition of Germany in the continuing absence of a treaty was mentioned at the three-power conference in Paris. But it is difficult to escape the conclusion that Russia did not want recovery in Western Europe, because stagnation and misery favoured the spread of 'communism,' as everyone very well knew. In other words, the Russian Government was prepared to forgo important benefits for its own people and others in order to further its political ambitions. For what was the Russian reply to the Marshall Plan? The first part of it was the Cominform; and if that is not an attempt to obtain by subversion and sabotage what can no longer be expected to result from misery and desperation, then appearances are very deceptive. The second part of Russia's reply was the rape of Czechoslovakia.

The U.S.S.R. has not been shabbily treated, either by the United States or by Western Europe. And talk of great powers dominating small ones

does not come very happily from the Kremlin. Neither is it sensible to talk of American imperialism; nor to decry American generosity with the plea that aid to Europe was resolved upon only to stop the spread of communism. The nice vague word, imperialism, is not the one which should be used; aggression is the right word. American aid *was* offered to Europe to stop the spread of 'communism'; Americans are not ashamed to say so. But to seek to improve the material conditions of peoples in order to prevent them from making an extreme choice in their form of government is not aggression; whereas to seek by subversion, sabotage and violence to produce revolution is exactly that, aggression.

Nor yet is it true that the United States was compelled by fear of depression to give grants to foreign countries. Even if it were so there would be nothing reprehensible about it. But that was not the case: America's problem at the time was an inflationary one; and E.R.P. made that problem worse, not better. It was true that the inflationary conditions would not go on for ever, but there need be no difficulty about keeping prosperity going for some years; world shortages will not have disappeared within a year or so. If the American economic system had produced great unsaleable surpluses already, one would judge E.R.P. to be very excellent common sense but not so remarkable generosity. Those, however, were not the conditions. The 'economic explanation' of E.R.P. is almost as far from the truth as the 'imperialist' one.

We have mentioned already the Organisation for European Economic Co-operation. This body was set up on a permanent basis in April 1948. We may notice that it might have been set up some months earlier; but the U.S. Treasury, mindful of the task of passing E.R.P. legislation through Congress, thought that the earlier moves which were suggested were better postponed; that is to say, the Western European nations were not unduly slow about setting up this body. The headquarters of O.E.E.C. are in Paris. It is charged with the duty of receiving applications for aid under the European Recovery Programme from its sixteen members. There is no trace of the sixteen surrendering any part of their national sovereignty to this body; moreover, it has been no secret that the Americans would have liked to see a stronger body altogether representing the sixteen. Great Britain, of course, gets the blame, which is inevitable, since it is Great Britain which must give the lead if anything large is to be accomplished. Now the surrender, even temporarily, of even a little national sovereignty is not something to be done lightly; nor is it the sort of concession to be made with the provision that it may be revoked at the first sign of national inconvenience. Yet there does seem to be a good case for considering very carefully what powers O.E.E.C. needs, and giving them to it. Co-operation, as well as production, to our utmost is perhaps our duty.

Another offshoot of the European Recovery Programme, existing so to speak inside the Organisation for European Economic Co-operation, is the Western Union. But Western Union is not an offshoot of O.E.E.C.; indeed, Western Union came into existence first. In a speech before the

House of Commons on 22 January 1948, Mr. Bevin advocated that the free nations of Western Europe should draw closer together. The result of this initiative, with which France was closely associated, was the signature on 17 March 1948 of the Treaty of Brussels between Great Britain, France, the Netherlands, Belgium and Luxembourg. By this treaty the five powers pledge themselves for fifty years to economic and social collaboration and to collective military aid. Indeed, the treaty does not go very far; but it must not be judged too soon. For it is designed not only to achieve these objects among the five signatory powers but also to form a nucleus around which other countries might gather into Western Union; and so far as this is the object, it would be a mistake to go forward too rapidly, since that would certainly scare away the Scandinavian countries, to mention only those. Anything in the nature of economic integration cannot come into being quickly, although France would certainly welcome more rapid implementation of the treaty than has yet occurred. Western Union carries at the moment no ideas of political union, although thoughts of that sort are also in the air; it is intended to be economic and military in scope, and the name is perhaps somewhat misleading.

Western Union, as the duration of the treaty implies, is not a device to assist the European Recovery Programme in its expected life up to 1952. The purpose is to form in Western Europe an economic system which can look the United States in the face. There is no good reason why American productive efficiency should not be reproduced in the long run in Western Europe; but this would require a far-reaching co-operation among the nations concerned. Great markets, which require the absence of trade restrictions, and monetary unification (or virtual unification) would be elements in the sort of co-operation required. Moreover, it is difficult to see how the system would work effectively without some pooling of sovereignty. These things need to be taken slowly; and for our part we have considerations to take into account touching the Empire, considerations not only of gratitude to the Dominions for their large contributions in our military and economic plights, but also of the intangible and indefinable things which are of great moment. Yet if Western Europe is not to slip into the background on the world's stage, if the dollar shortage is not to go on for ever, some closer co-operation is necessary. It is not just a matter of saying, "Well, when we have recovered a little, let us put down the exchange rates again relatively to the dollar; we will hope that the United States will not increase its tariff; and then our lower standards of living in Western Europe will enable us to undersell the Americans and end the dollar shortage; and even if they keep our goods out, we will undersell them in the rest of the world." That attitude is too defeatist. Why should the nations of Western Europe rely on relatively low standards of living for their peoples? Caution is certainly needed in approaching Western Union; but the implications of the alternative should not be lost to sight.

The Bank for International Settlements may play a very useful part in Western Union.

It has been convenient to leave until this point the Bank for International Settlements, because its most promising future would be connected with Western Union. Let us look very briefly at this institution.

Unlike the International Bank for Reconstruction and Development, the Bank for International Settlements was not set up primarily to make loans; its original function resembled more closely that of the International Monetary Fund, for it was a transfer problem which gave rise to the B.I.S.

The reparation payments due from Germany under the Treaty of Versailles and the interallied debts contracted during World War I presented the most formidable difficulties of transfer. The various Governments managed, until the great depression, to collect the necessary sums from their nationals by taxation, or by borrowing; but, since the sums were due in foreign currencies, there was the additional problem of exchanging them into the payee's money. Clearly, if a Treasury merely instructed its Central Bank to buy tens of millions of pounds worth or milliards of francs worth of dollars on a particular day, the exchange rates would alter enormously. Naturally care was taken to disturb the foreign exchange equilibrium as little as possible, but this presented a formidable difficulty which was enhanced considerably by exchange speculation.

The Young Committee, appointed in 1928 to make recommendations concerning German reparation obligations, by then admitted to be impossibly large, examined the transfer problem. Its report suggested the establishment of a special bank to assist with the problem: the B.I.S. was the outcome.

The B.I.S. was set up in May 1930 at Basle, a reasonably central and neutral place. Even at this time, however, there were people who hoped that the B.I.S. would grow into something bigger, resembling a super-national bank having the Central Banks as customers. Like the League of Nations from which it ultimately derived its existence, the B.I.S. was really a piece of machinery rather than a separate authority.

The capital of the B.I.S. was taken up by the Central Banks of Belgium, France, Germany, Great Britain and Italy; and by two groups of commercial banks in Japan and in the United States respectively. Without regard to holdings of shares, the Governors of the Central Banks of these founder countries could become *ex officio* directors of the B.I.S. and could appoint substitute nominees. The Federal Reserve System did not take up the capital available for it, the plea being that the Federal Reserve Banks had no power to hold shares; nor did it appoint directors to the board of the B.I.S. It would be no exaggeration to say that the monetary authorities in the United States were not enthusiastically favourable towards the B.I.S. The countries actually represented on the Board of the B.I.S. in 1949 were Belgium, France, Great Britain, Italy, the Nether-

lands, Sweden and Switzerland. Since World War II there have been no German nor Japanese directors, because, as the Sixteenth, Seventeenth, Eighteenth and Nineteenth Annual Reports of the B.I.S. have each remarked, "The legal consequences arising from the situation at the date of this Report remain to be determined."

The chief executive officer has usually been an American, however. The last American to serve in this capacity was Mr. Thomas H. McKittrick from 1939 to 1946. The present general manager is M. Roger Auboin of France.

The customers of the B.I.S. are chiefly Central Banks, with whom it may transact quite a wide range of business: dealings in gold; making advances; dealings in short-term paper of prime liquidity including Treasury Bills, etc.; foreign exchange dealings; current and deposit account transactions; and acting as agent or correspondent. All these transactions the B.I.S. may perform as well with any person or institution in any country, provided that the Central Bank of that country does not object. Its special function was to facilitate international clearings.

But the B.I.S. may *not* issue notes; accept bills of exchange; make advances to Governments nor open current accounts for them;¹ acquire business interests; nor hold more real property than it needs to transact its business.

The B.I.S. has had a difficult life. Founded in 1930 with the power of dealing in Gold Standard currencies, it had at once to face a serious contraction of its business when sundry currencies went off the Gold Standard in 1931. When the rest were devalued in 1936 the B.I.S. was in further difficulties, though it avoids all or nearly all exchange risk by balancing its assets and liabilities in each currency. However, the accounts of the B.I.S. are still kept in old Swiss gold francs of 0.29032258 of a gramme of fine gold, that is to say, in Swiss francs as they were before the devaluation of 1936; since then the ordinary Swiss franc has had a gold content of 71 per cent of the old one.

As may be imagined easily, the B.I.S. had a tricky course to steer during World War II through the squally waters of neutrality. It issued a declaration of strict neutrality in December 1939, and incidentally fled away from its exposed position at Basle. There seems to be little question that the B.I.S. did all that was possible to avoid actions hostile or helpful to any belligerent; in particular it demanded repeated assurances from the then very powerful Reichsbank that gold transferred by it to the B.I.S. had belonged to Germany before the war. None the less it did accumulate some looted gold.

The B.I.S. received a death sentence at Bretton Woods: by a recommendation of the Conference it was to be liquidated "at the earliest possible moment." However, second thoughts seem to have prevailed.

¹ These restrictions touching Governments are rather absurd, certainly in the present time: apart from the high degree of integration existing between Central Banks and their respective Governments, the B.I.S. has power to buy Treasury Bills which is almost the same thing as making advances to Governments.

Together with the Allied Governments, the B.I.S. has been active in identifying looted gold coming from the Reichsbank: every bar which had come into its possession from that source was examined. Although it does not seem very certain in a small percentage of cases to whom the gold should properly belong, this chapter is now closed by an agreement between the B.I.S. and the Allied Governments on 13 May 1948. On the same date, by a separate agreement, the assets of the B.I.S. in the United States, which had been blocked since 1941, were unblocked.

The B.I.S. still possesses large assets in the form of investments in Germany. On 31 March 1949 these amounted to 297 million old Swiss gold francs out of total assets of 722 million. The former assets may have to be virtually written off, although there are liabilities belonging to the German Government which offset some 76 million of the total. It should be observed, however, that these doubtful assets were acquired by the B.I.S. not on its own initiative, but as the result of a charge laid upon it by the international conference at the Hague in 1930 which set up the B.I.S. Moreover, in acquiring these assets, the B.I.S. received certain rights which may prove to be good guarantees against loss; for these the founder countries would then be responsible.

With the exception of these German assets, the funds of the B.I.S. are very liquid. Yet, although the volume of business transacted by the B.I.S. increased considerably during the year ended 31 March 1949, it is still below the pre-war level. The 6 per cent cumulative dividend payable on the capital of the B.I.S. is in arrears.

It is one of the minor ironies of our times that the B.I.S. was able to find the resources for a moderate loan to the Netherlands from the International Bank for Reconstruction and Development, that somewhat anaemic child of Bretton Woods. It is clear that the relations between these two institutions are cordial and intimate. Moreover, the B.I.S. has an important link with the International Monetary Fund in the person of M. Camille Gutt himself, who was a director of the B.I.S. before becoming the Managing Director of the I.M.F. On the whole it would seem that a more sympathetic view of the B.I.S. may be taken in Washington than was at one time the case.

The most interesting development touching the B.I.S., however, is connected with the recent agreements for intra-European payments and 'compensations' (i.e. clearings). The first of these predated the Organisation for European Economic Co-operation (O.E.E.C.); it was entitled the First Agreement on Multilateral Monetary Compensation, and was concluded in Paris on 18 November 1947. This was superseded on 16 October 1948 by the Agreement for Intra-European Payments and Compensations, which was replaced in turn by a new agreement signed on 7 September 1949 under the same title, each of the two latter being known usually as I.E.P.S. (Intra-European Payments Scheme). The two I.E.P.S. agreements were made under the aegis of O.E.E.C., and enabled a country which was a net creditor inside Europe virtually to pass on in its own

currency to other European countries some of the American aid received. In this way the E.R.P. aid became conditional upon the utilisation by debtor countries of the drawing rights extended by the creditor country. Thus Belgium has been receiving dollars and granting drawing rights in Belgian francs.

Each of these clearing house schemes (which are too complicated and too ephemeral for extensive examination in this book), has required the services of an Agent, to whom sixteen European Central Banks have disclosed their confidential information respecting balances. Moreover, the Agent gives the instructions, in accordance with the agreements, "for the debiting and crediting of the payments agreements accounts held at the central banks to the extent necessary to carry through the compensations and to make available the drawing rights under the Agreement."¹

The Agent has been the B.I.S., and it is evident that the calculation of the compensation is a matter of no little skill and judgement. But in acting as the Agent, the B.I.S. has not been increasing the scope of its own banking activities, although it has been developing a particular expertise to be found hardly anywhere else. Furthermore, all of these activities arise from the conditions of exchange control still prevalent; thus eventually, as or when these controls are relaxed or removed, the remarkably complicated foreign exchange relationships of the present will pass away, and this valuable function of the B.I.S. will disappear with them.

The new I.E.P.S. could hardly have been agreed upon at a more unfavourable moment: within a fortnight Great Britain and sundry other countries had devalued their monetary units. The estimates of international debit and credit balances, on which the drawing rights were based, have proved to be very wide of the mark; a trouble which was aggravated greatly no doubt by the devaluations, though perhaps not originated by them. Intra-European trade has been aided by I.E.P.S.; but many specialists in this tangled monetary problem have been hoping for a European Payments Union which would supersede I.E.P.S. by the establishment of more extensive, rigid and automatic clearing machinery. Indeed the Council of O.E.E.C. agreed on 1 February 1950 upon principles for such a union; but implementation of the principles was not undertaken at that time, because E.R.P. countries could not agree upon the extent of the rigidity which a new mechanism should have.

There are countries, notably Belgium, which want something approaching a local Gold Standard, of a type more rigid than the Gold Reserve Standard; but there are also other countries, of which Great Britain is outstanding, which will not agree to such an inflexible system. If or when such a change is put into effect, it is possible that the B.I.S. may become something more than the Agent which it has been hitherto, thus playing perhaps in Western Union a role which may be important long after E.R.P. and its organs, E.C.A. and O.E.E.C., have ceased to exist.

It seems doubtful whether the time has come yet to think of facilitating

¹ B.I.S.: *Nineteenth Annual Report*, 13 June 1949, p. 221.

the system of 'compensation' by empowering the B.I.S. to issue notes which might serve as a currency among Central Banks. But such a further development might well be kept in view. There might in the future be several other tasks of importance for the B.I.S. to discharge in support of Western Union, including the promotion of Central Bank or Exchange Equalisation Account co-operation; operations to relieve seasonal weaknesses of currencies in Europe; and the development of a common point of view. (It may be mentioned incidentally that the B.I.S. *Annual Reports* are among the current classics of economic information and comment.)

The prospect of valuable collaboration between the B.I.S. and the Bretton Woods institutions is highly satisfactory. The system of international monetary control will probably be a better one and a stronger one if we have four elements in it: the International Monetary Fund; the International Bank for Reconstruction and Development; national Exchange Equalisation Accounts; and the Bank for International Settlements.

BOOKS

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Paul Einzig, *The Bank for International Settlements* (1930).¹

J. M. Keynes, *A Treatise on Money* (1930), vol. II, ch. xxxviii.¹

Weldon Welpling, *Money and Banking* (1947), ch. xxix.

¹ These works are interesting but in some respects a little out of date.

CHAPTER XIX

NOTES ON THE GOLD STANDARD; ON MONETARY POLICY; AND ON THE PREDICAMENT OF GREAT BRITAIN

For the near future, anyhow, the Gold Standard will be the Dollar Standard.

ONE of the arguments put forward against the Gold Standard in the period between the Wars stated that there was not enough gold. If this argument is repeated to-day, what does it really mean? Does it claim that the amount of some 1,000 million ounces troy of fine gold in the possession of the world's monetary authorities is, as such, insufficient? That is not the point. The meaning of the contention is that gold stocks to the value of some \$38,000 million are not large enough; for it is the value of the gold stocks which may regulate the volume of money. Thus the argument depends upon a fixed price for gold. We have seen that par values have been fixed for the currencies of thirty-eight countries and for many dependencies in addition; but we have observed also that within the framework of the International Monetary Fund a country may increase the price of gold in its own currency; and that the I.M.F. may raise the price of gold in the currencies of all member countries simultaneously. Thus, leaving out of account for the moment the way in which the monetary gold stocks are distributed among different countries, the machinery exists for changing the value of those gold stocks when need arises. But whether it would be possible to use the machinery is another matter; for this would entail convincing the United States that devaluation was necessary. In January 1950 the United States possessed a gold stock of \$24,395 million, which was more than two-thirds of the entire gold stock of twenty-nine leading countries (excluding the U.S.S.R.).¹ This is about twice as much as is needed at the moment to support the American structure of credit. It would be difficult in these circumstances to persuade Congress that it was necessary to write up the value of the American gold stock. So long as America's problem remains one of inflation, any large increase in Federal Reserve Bank assets would be absurd. If the rest of the world set about devaluing its currencies again without the United States, the other countries would be left with less than one-third as large a volume of gold with which to manœuvre; and such devaluations would entail an increase, probably a large one, in the value of the dollar in relation to other cur-

¹ *Federal Reserve Bulletin* (March 1950), and B.I.S., *Nineteenth Annual Report* (1949), p. 150.

rencies. A second devaluation would not be helpful at this time for several countries including Great Britain, as we shall see in a moment.

So the conclusion emerges that the argument of gold shortage has some force at present. But we must be quite clear that this is so only because of the extraordinary distribution of gold existing at the moment. If countries possessed gold stocks approximating to the same proportion of their aggregates of money, then there is little doubt that writing up, or writing down, the world gold stock would be feasible; in which case the view that the volume of gold was too small would lose its force.

We have changed over at once, in touching upon the gold shortage thesis, to the maldistribution argument. The latter is, as it was during the later 'twenties, a more serious matter. The particular complaint of the 'twenties was that the United States and France had acquired too much of the world's gold stock. As an argument against a rigid Gold Standard, that is, against the Gold Circulation Standard or the Gold Bullion Standard, this contention had serious force. It was the case that other countries, notably Great Britain, struggled for painful years to safeguard their gold stocks by attempting to force down their price-levels at the cost of high unemployment. But the Gold Reserve Standard was free from this appalling drawback. Adequate working gold stocks could in effect be safeguarded by controlled and agreed depreciation of the currency of the country in danger of losing its reserves. It is true that a policy to combat incipient maldistribution required an agreed policy, concurrence being necessary from all the six countries which adhered sooner or later to the Tripartite Monetary Agreement of 1936. Whether agreement would be as likely to be found among the forty-seven nations members of the International Monetary Fund, in the freer days to which we can look forward, remains problematical. That is one reason why it was suggested in the last chapter that the revival of national Exchange Equalisation Funds would be beneficial: sensible agreement would be more likely, it is contended, if the various countries were somewhat equally armed with their own Funds.

But in order to safeguard gold reserves, a country must first possess them. The reasonable contention used to be heard that the Gold Standard was an international standard: that its purposes were by stable exchange rates to facilitate international trade and international lending; and that it must be judged, therefore, by the way in which it fulfilled these objectives, taking into account any disadvantage entailed in their attainment. At the moment, and in the future unless something drastic is done about it, the Gold Standard could only be a Dollar Standard. With E.R.P. or without, Western Union or no, the desire for American goods is and will be so great for some years at least that little more gold than the minimum required as emergency reserves will be left in Western Europe and in general in any other country than the United States. As things are, there is no prospect at all of other countries using favourable balances of payments to acquire a large amount of the American gold. Devaluation of many other monetary units in relation to the dollar would have been necessary sooner or

later even if the countries concerned had been treading paths of economic prudence. It was by mismanagement that the devaluations came as soon as September 1949. As to Great Britain, for instance, it was not in itself a step towards recovery to alter the terms of trade violently against ourselves: but that change does aid of course in the solution of the balance of payments problem. The devaluations having taken place prematurely, there should be no need of a further upward revision of the international value of the dollar. On the contrary, the present exchange rates should be taken by our policy makers as given; and the advance towards our recovery be charted in such a way as to require no further devaluation. When ex-belligerent countries, and indeed others as well, get on their economic (and social) feet again, it will be of little moment whether we use some sort of Gold Standard mechanism to ensure as much equilibrium as we can get in the foreign exchange market, or whether we cast impiously aside the golden symbol and substitute the dollar sign. If the spirit of co-operation and an understanding of the realities prevail, and therefore agreement is reached among the leading nations (excluding the U.S.S.R.),¹ other countries will no doubt follow their lead; then it would be possible, using the institutions enumerated at the end of the last chapter, to control exchange rates as well as they can be controlled consistently with national sovereignty. But what will matter will not be the Gold Standard mechanism, but the supplies of dollars; and of cardinal importance in relation to these will be the understanding of the situation by the monetary authorities in the United States and the spirit of sympathy with which they consider the ills of less fortunate peoples. As to the latter, have we any reason to fear? Can we suspect the country which produced the Marshall Plan of cynical and short-sighted indifference? Manifestly not. But an understanding of the problem by Americans in general, such as would enable Congress to act in a liberal fashion respecting the tariff and in similar ways? That is something else.

The maldistribution of gold is so great at the moment that this will have to be corrected by specific and drastic action if it is the Gold Standard rather than the Dollar Standard which we are going to operate in those spacious days to come. Yet even if the redistribution is made, the problem of safeguarding a working gold stock will be a dollar problem: when France has, for example, accumulated an excess of sterling balances and seeks to obtain gold for them, the purpose of the gold will be to get dollars, and the reason that gold is sought will be that Britain has not enough dollars to buy the sterling back from France. An operating Gold Standard would be to-day, as it would continue to be in the near future, a Dollar Standard at one remove. A golden cushion may seem comfortable to some.

A further devaluation of other currencies in relation to the dollar would not be helpful at present, nor in the near future, since the demand for

¹ In a country where production and international trade are in the hands of the State, stable exchange rates would be meaningless; they are virtually fixed by the State also, at its discretion.

American goods is so inelastic that an increase in the value of the dollar on the foreign exchanges would only make worse the problem of the over-anxious customers: they would want the same or almost the same volume of goods as before, and these would cost them more, so that their dollar deficiencies would be greater than ever.

When we turn to the further future, the picture might be rather different. But it is very doubtful whether anything valuable can be said about that as yet. To a hard-working and tranquil Western Union, in which specialisation had overcome national boundaries, all sorts of astonishing prowess in production might be possible. American relative efficiency in output might then be a thing of the past, and the dollar problem with it. Then, indeed, a Gold Standard might really be a Gold Standard—unless, of course, by that far-off time the production of gold by atomic alchemists had put paid to such old-fashioned notions.

What then will be the merits and demerits of having the pound and other currencies attached to the dollar during the post-recovery phase? In so far as some of the currencies even among the sixteen¹ E.R.P. nations are likely to be still somewhat precarious in internal purchasing power, the dollar might serve as a useful mooring buoy; that is to say, the steps necessary to maintain the external value of a weak currency would keep up its internal purchasing power too. To reintroduce monetary policy as such in that way would be, indeed, to go back to the past: it would be the practice of the old Gold Standard rite of making the internal value of a currency unit conform to the external value. But even if that is old-fashioned, outmoded and the very thing that the development of ideas since World War I has taught us to avoid, none the less we should be rational and not fanatical about the matter. If the dollar were reasonably stable in purchasing power, evidently it would be better to have another currency tied to the dollar, and to practice the art of keeping in step, rather than permitting inflation to go on.

But suppose during the 1950's that we have our own economic system well in hand with the pound strong, free and stable in the foreign exchange markets: would a link with the dollar be useful? So long as the dollar's value is reasonably stable, most certainly yes. If sterling and other currencies have become sound by then, that will not mean that the dollar has ceased to be universally acceptable. Any link with the dollar in those conditions would certainly be beneficial for international trade and lending.

But suppose that the dollar fluctuates violently; suppose that there is a 'boom-and-bust' crisis followed by a severe slump in the United States, so that amid crashing prices the purchasing power of the dollar shoots up: that is the danger. That is what one hopes will not happen. But if it did, then the only wise course for other countries would be to insist for all that they were worth that their currencies be allowed to fall in relation to the dollar. Otherwise such countries would suffer the direct impact of the

¹ Seventeen with Western Germany.

American depression. An exchange adjustment would shield them from most though not from all of it. Further, the proper course would be for such other countries to unbalance their budgets boldly, thereby keeping up their national incomes in the face of falling world prices; and to implore the United States to do the same.

Thus the Dollar Standard will need just the same sort of flexibility as the Gold Reserve Standard developed; and, granted that, it is contended that such a Dollar Standard would be a real advantage, not to be thrown away at the first sign of international monetary malaise.

In the various circumstances which we have been considering would a flexible Gold Standard, that is to say the Gold Reserve Standard, be better or worse than the Dollar Standard? Now that is an unreal question. These would be virtually the same thing. That is exactly what we meant when we said that the Gold Standard will be the Dollar Standard. The value of gold would conform in a slump (or in a boom) to the value of the dollar; the present price of \$35 per fine ounce will remain. The United States is too strong: far from swaying on the swell round the golden anchor, the American ship of state starts its economic engines (ahead or astern) and carries with it the hawser, the anchor, and all the other ships whose moorings its dragging anchor fouls.

We are somewhat conscious at the present time of the drawbacks of overfull employment. That must not cause us to forget that full employment is one of our economic criteria. On the other hand we know that we must have international trade in order to exist, and stable exchanges are very necessary for that, whether they depend upon a Gold Reserve Standard or upon a Dollar Standard. Let us suppose then that, after we have done with all our present exchange restrictions, a conflict arises between the two: suppose that we can maintain the exchanges only at the cost of unemployment, or employment only at the cost of letting sterling fall. Which should we choose? The obvious answer is that we should choose to maintain employment and allow sterling to sag; and in the main that is the voice of wisdom. But we need to be a little perspicacious about this matter. It is not, after all, full employment at any standard of living that we seek, but full employment at a decent standard of life, the best which we can manage for all our people. We could have full employment for ever without doubt by stopping imports of food: but could we scratch a bare existence from the soil for fifty million people? Thus if we see unemployment at three-quarters of a million, and if we are told that this is necessary to assure our export position, then, bearing in mind that perhaps half of that figure is inevitable transitional unemployment, we should not jump to the conclusion that unemployment is really being created deliberately for some base ulterior motive such as ensuring the profits of the rich or something of that sort. Experience will show what sort of margins of unemployment of all sorts are the minimum which we should seek and the maximum which we should tolerate. But it should be realised that this is not a matter of extreme simplicity; and that a too

faithful pursuit of full employment may cause greater suffering than it obviates.

International lending is even more dependent upon stable exchange rates than is international trade: for trade transactions can be hedged in normal times in the forward market; lending operations cannot, since the cost of hedging is too great for short-term operations and it is impossible to operate years forward to cover long-term lending. Of short-term operations we have little to say: they will not be a necessary part of any Gold Standard mechanism again; and, to the extent that they prove to be a nuisance in the phase to follow the present time of direct control of exchange dealings, short-term movements will be offset by Exchange Equalisation Accounts or curbed in some other fashion.

But long-term lending is another matter. It is recognised to be beneficial, as the creation of the International Bank for Reconstruction and Development testifies. It is true that much long-term lending between the wars was fantastically unsound; and the International Bank is designed, of course, to obviate a repetition of such mistakes. Yet before World War I, long-term overseas lending was to a large degree successful and highly beneficial. The Argentine, to quote a famous example, would not have had its railways built so early but for British capital. The unrivalled progress of the nineteenth century was connected intimately with such lending among the nations. But the opportunities for international lending are not so great to-day: the great undeveloped areas of the world are not what they were. Thus it is contended that if our future Gold or Dollar Standard is not so rigid and therefore so suitable for long-term lending, then, taking into account the change in the financial scale of operations, we shall not lose anything comparable with what our grandfathers and great-grandfathers would have lost without the rigid Gold Standard. None the less opportunities for international investment will be present, and the existence of a slowly flexible Dollar or Gold Standard will help us to seize them.

Monetary policy is now subsumed into economic policy.

There used to be great discussions about monetary policy as such. Especially between the wars fierce controversies raged: was not the long-maligned policy of mercantilism really a method of ensuring an adequate gold stock for a country by the only means known in the sixteenth, seventeenth and eighteenth centuries? Thus was it not fundamentally a monetary policy designed to avoid deflation? Was not the policy of foreign investment between the wars really a similar method of ensuring employment in the export industries and of gaining national economic power? Were these not sound and reasonable economic policies? Should we maintain for its own virtues a rigid Gold Standard? Were stable prices the proper objective, and if so could monetary policy achieve them? What sort of monetary policy would eliminate the trade cycle, if possible eradicating its causes? Could money be rendered 'neutral' so that any fluctuations

which remained were natural and proper ones? Were stable incomes rather than stable prices the proper objective of monetary policy? Could monetary policy establish and maintain full employment? All these questions were asked and many more.

It is contended that all these thoughts are largely irrelevant to-day. And it is not that the conditions have altered. Changes there have certainly been, and unfortunate ones; but the greatest change is in ourselves and not in our economic stars. We used to think of monetary policy as something having an existence separate or largely separate from economic policy: particularly, monetary policy was something evolved and practised by Central Banks, a very practical everyday affair, from which long-term economic ideas of the Government were rather remote. Monetary policy has ceased to exist! At least monetary policy as such has ceased to have a separate existence. It has been swallowed up by economic policy; and Central Banks and Treasuries have become or are becoming one functional entity.¹

Our economic criteria are no longer in dispute. Practically on all hands full employment and maximum output are accepted as our standards and objectives. The influence of Lord Keynes and Lord Beveridge is obvious. Yet we shall have in practice to be somewhat prudent and careful, even if the ideas are understood widely in a general way; for neither full employment, as we have just been suggesting, nor maximum output is a clearly defined condition easily ascertainable by measurement.

Moreover, there is a large measure of agreement also regarding the broad lines of economic policy whereby to reach our objectives. By budget deficits or budget surpluses we can and should tilt the economic scales back towards the position of balance which is the rough-and-ready equilibrium of actuality. There remain only the interpretation of terms to dispute about, such political and social questions as workers' control (to which the policy of nationalising industry is so largely irrelevant), and international methods and purposes.

It is true that there may remain, as we argued in Chapter XVII, an important field for the exercise of monetary control by Central Banks. But Central Banks' instruments of control will not be used to pursue some separate objectives existing in the minds of banking authorities, but to pursue the same purposes as are sought by fiscal policy. Of course, budgetary policy and Central Bank control could both together be described as monetary policy; but it is suggested that this would be misleading: the objectives sought are not monetary and the methods are not all monetary either. Surely the term, economic policy, belongs in this context?

Perhaps some economists were too inclined between the wars to think in the following manner: the trade cycle is an evil; therefore it would be wise statesmanship to prevent it; but we do not agree among ourselves exactly what happens in the trade cycle, nor why things go wrong; until

¹ The nationalisation of Central Banks is almost entirely irrelevant to this proposition.

we have an acceptable theory of the matter, we do not really know what we are talking about; we see that the trade cycle is not a natural phenomenon like the rotation of the earth; therefore, human forces must exist causing the trade cycle; and it should be possible to identify those forces, at least in retrospect; if we can demonstrate the causes beforehand, however, we should be able to control them and thus to avoid the trade cycle; but until we have made up our minds on all these points and stopped finding fault with our colleagues' ideas, we shall continue to have no general precepts on economic policy as touching the trade cycle to enunciate; at best we shall propound the day-to-day measures of expediency which seem good to us in the rather dim light of our hazy ideas about the trade cycle; and thus we shall be liable all to say different things.

It was an error of perfectionism. It is certainly important, most important, to advance and to spread knowledge and understanding of the trade cycle more than of many other matters. By no means should the pursuit of the trade cycle and its causes be abandoned. But it is practical and sensible behaviour to say to ourselves *ad interim*: we believe that the trade cycle will go on, and we do not understand fully why nor how; it will go on unless we do something about it: can we mitigate this evil thing while the methods whereby to eliminate it are still being sought? The answer which we have been trying to put forward in this book is that we can do so by the exercise of an economic policy which subsumes monetary policy within itself.

We have abandoned or we are abandoning the old criteria of monetary policy. We are not really greatly interested any more in stable prices nor in stable incomes; whether money is 'neutral' or not does not really matter; the question whether a monetary policy could be designed to eradicate the trade cycle can wait until later; the lesser effects of the Gold Standard and of neo-mercantilism can be disregarded. The process of our intellectual development has achieved simplification. Many of the foregoing considerations belong only to our perfectionist phase when we laid all the stress upon the elimination of the trade cycle. It was this objective which gave in theory to monetary policy such an important separate role: to-day the elimination of the trade cycle is in academic cold storage, and the ideal monetary policy with it. For practical purposes monetary policy has become a poor and compliant relation of budgetary policy.

Great Britain can advance to a higher standard of living than ever before, but our relative position among the nations will never be again so favourable as it was.

At the beginning of Chapter IX (page 92) we contended that there were "no difficulties preventing an understanding of our present plight"; and since that point a lot of space has been devoted to a discussion of the opposite problem of deflation and depression. In the final paragraphs of this book let us review briefly the nature of our present predicament, and observe what conclusions may be drawn.

There is no need to labour the obvious destruction of our productive resources which took place during the war. We lost some 300,000 service casualties killed, which is, apart from the incalculable sum of human unhappiness which that represents, a severe blow to our productive powers; for they were among the best men who fell. War damage payments by the Government up to 31 March 1947 had amounted on all accounts to £437 million, and payments were still going on. But more serious than the damage, indeed, were the wearing out and the obsolescence of productive equipment, for which no adequate figures have been compiled.

One of our great troubles at the moment, which is very simple but not realised sufficiently clearly nor widely, is that we cannot afford to divert enough productive resources rapidly to make good these deficiencies. Why not? The simple answer is that we must go on living in the meanwhile. There is, for example, an urgent need for houses. Like other ex-belligerent countries we have gone too far, it seems certain, in trying very naturally to satisfy this need; for resources devoted to houses cannot be used at the same time to build factories. In particular we cannot use all the productive resources which we should like to do on building up our productive capital investments because we must perforce increase very greatly the volume of our exports.

In 1938 our retained imports cost £858 million. Our exports came to £471 million. Thus there was a gap of £387 million. What filled that gap? Without labouring all through the balance of payments, we may notice the three chief items which filled the gap: namely, income from overseas investments, exceeding £200 million; income from shipping services to foreigners, exceeding £100 million; and income from banking and insurance services to foreigners, exceeding £35 million.¹ Together, then, these three income items practically closed the gap. It is important to observe that these three were receipts on income account, for the gap was also on income account; so that it would be unsound, and indeed impossible in the long run, to make good the excess of imports over exports by borrowing on capital account. How do our three important invisible exports stand to-day?

The income from overseas investments has gone. World War I reduced our creditor position; World War II took the rest. From September 1939 to June 1945 we realised foreign investments to the amount of more than £1,100 million; since then practically all the rest has gone. They went towards paying our external liabilities arising from the war. If we add to our sales of foreign securities the sum of sterling balances held abroad, the aggregate of 'external disinvestment' amounted at the end of 1946 to £5,000 million.² Since then, as we saw in the last chapter, we have been borrowing heavily from the United States, Canada and elsewhere. We used to be the greatest creditor nation. Now we are debtors.

¹ Central Statistical Office, *Annual Abstract of Statistics*, No. 84, 1935 to 1946; League of Nations, *Network of World Trade* (1947).

² B.I.S., *Seventeenth Annual Report* (1942).

Some idea can be gained of our loss of earning power from shipping services by observing the fact that one-third of our merchant navy was lost during the war. Similarly the present direct control of foreign exchange dealing has impaired our ability to earn income abroad by financial services. Moreover, as we observed in Chapter XVIII, there has been a slight 'natural' worsening of the terms of trade, and a large 'artificial' one due to our own mismanagement. Hence, broadly speaking, the great gap existing at present between our imports and our exports.

Let us see how far we have gone towards closing the gap.

TABLE XXVI
UNITED KINGDOM: EXTERNAL TRADE, 1945-8¹

Year	Retained Imports		Exports		Excess of Imports over Exports
	£000,000	Volume 1938 = 100	£000,000	Volume 1938 = 100	£000,000
1945	1,053	61.9	399	45.8	654
1946	1,247	68.3	912	99.3	335
1947	1,734	77.7	1,139	108.7	595
1948	2,013	80.8	1,582	136.3	431
1949	2,214	87.3	1,784	150.8	429

The main conclusion which we must draw from these figures is that the excess of imports over exports is still a very serious matter, as, indeed, we are reminded frequently both by the Government and by unofficial commentators. Moreover, it began to become manifest in the closing months of 1948 and early in 1949 that the great sellers' market was passing: the days when it was possible to sell 'anything anywhere at any price' were clearly numbered. Of course, the fall in American prices is helpful so far as the cost of imports is concerned. But what about exports to the United States and to other countries? Devaluation is a surgical operation, not a tonic: we require to do economic jerks to regain our fitness. The most critical question of all for the next few years is whether we are going to be able to compete; and that is a matter of costs. The opinion is submitted that this matter of costs, of getting costs down and of continuing to get them further down, is of greater moment by far for the good of all our people than nondescript nationalisations and chimerical workers' controls.

Have we any other troubles? We have. There is an element of ingratitude to be found in remarks about the unwillingness to work. We need to remember, particularly the more fortunate of us, that there are millions of people in Great Britain working hard and regularly for wages which are none too princely. We need to remember also that an appalling propor-

¹ Compiled from Central Statistical Office, *Annual Abstract of Statistics*, No. 84, 1935-46, Table 215; *Monthly Digest of Statistics*, No. 40, April 1949, Table 113, and No. 50, February 1950, Table 111; and *Records and Statistics*, 28 January 1950.

tion of our labour force suffered from unemployment between the wars; and if these men do not all work as hard as they might, and thereby infect particularly the younger of their fellows, that is in part to be reckoned as the effect of our errors and of our ignorance in the inter-war years. Inadvertently we brought some of this on ourselves. Yet it is true that compared with the people of the United States we do not work hard; when allowances have been made for differences in natural resources and in productive capital goods, that is still true. Partly the trouble arises from the fact that we do not believe in our economic and social system as Americans believe in theirs; partly from suppressed inflation; partly from our depressing economic conditions; partly from a continuing failure to realise the extent to which our economic position has changed for the worse; partly still from war weariness.

Some people feel that the bulk purchases carried out by the Government abroad have added to our troubles. Briefly the matter may be stated somewhat loosely like this: in a sellers' market, where demand is outrunning supply, individual buyers will all make little fools of themselves; and a monopolistic buyer will make one big fool of itself. The Government's bulk buying has probably made little difference either way. If its contracts are very long-dated, however, as the sellers' market begins to give place to a buyers' market, then Great Britain will lag behind in obtaining advantage from the change; and that means that the fall of our costs will lag behind the fall in the costs of other countries; and that would be something serious.

And what of the terms of trade? There are two views on that subject. There is a view which holds that the experience of the inter-war years is not going to be repeated. For reasons of soil erosion, the growth of population and the drift to the towns, the absence of empty agricultural areas, and for other reasons which we shall not even mention, the argument is heard that food prices are not going to drop as they did after World War I. If that were true the outlook would be the more serious, considerably more serious for Great Britain. A large fall of agricultural prices would close our gap, and those who hold the opposite view regarding the terms of trade have been waiting, watching and hoping for the fall of food prices to occur. It is true that a fall of food prices would cause some secondary effects in the way of decreased buying power in primary producing countries which are customers for our exports. But on the whole such an alteration of the terms of trade would be beneficial to Great Britain on an important scale. What is going to happen? Which is the right view? We will put forward the opinion quite fearlessly that the terms of trade will change in favour of Great Britain, change by a considerable margin and change soon. This is a highly technical subject which is necessarily so largely conjectural that an examination of the technicalities is certainly not justified in the present volume. The opinion which we have stated is frankly speculative. It is only to be hoped that it is a good guess.

If the optimistic view about the terms of trade is the correct one, what

of the future? In the future we can attain a higher real income per head of population than we have ever known. Even with the relative increase in the real income of the poorest sections of the community, we are not at that point yet; nor are we likely to overtake the pre-war level for some years. But that improvement is not likely to be deferred for decades and decades. An ageing population is one drag on the standard of living; and the bias which we spoke of in earlier chapters towards depression in our economy may prove to be another. Our trading position with other countries is very weak at the moment and may long continue precarious. We were creditors and now we are debtors in receipt of American grants. Yet none the less, we can reach within a foreseeable distance of time a higher standard, which will continue to improve, not perhaps year by year but certainly decade by decade.

But our economic pre-eminence among the nations is gone. That we shall never enjoy again. That, with a good deal of present discomfort, and besides the inestimable personal losses, was the price of two World Wars. The tale of Great Britain's predicament is a sorry story? It is an honourable one.

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